

A tall, dark signpost stands in a grassy field. At the top, a dark sign features the word "TYLER" in large, white, serif capital letters. Below the name is a stylized illustration of a Native American man's head in profile, facing left, wearing a feathered headdress. Underneath the illustration, the words "JUNIOR COLLEGE" are written in a smaller, white, serif font. The signpost is supported by a brick base and has some decorative scrollwork. In the background, a large, multi-story building with a classical architectural style is visible under a clear blue sky.

**TYLER**

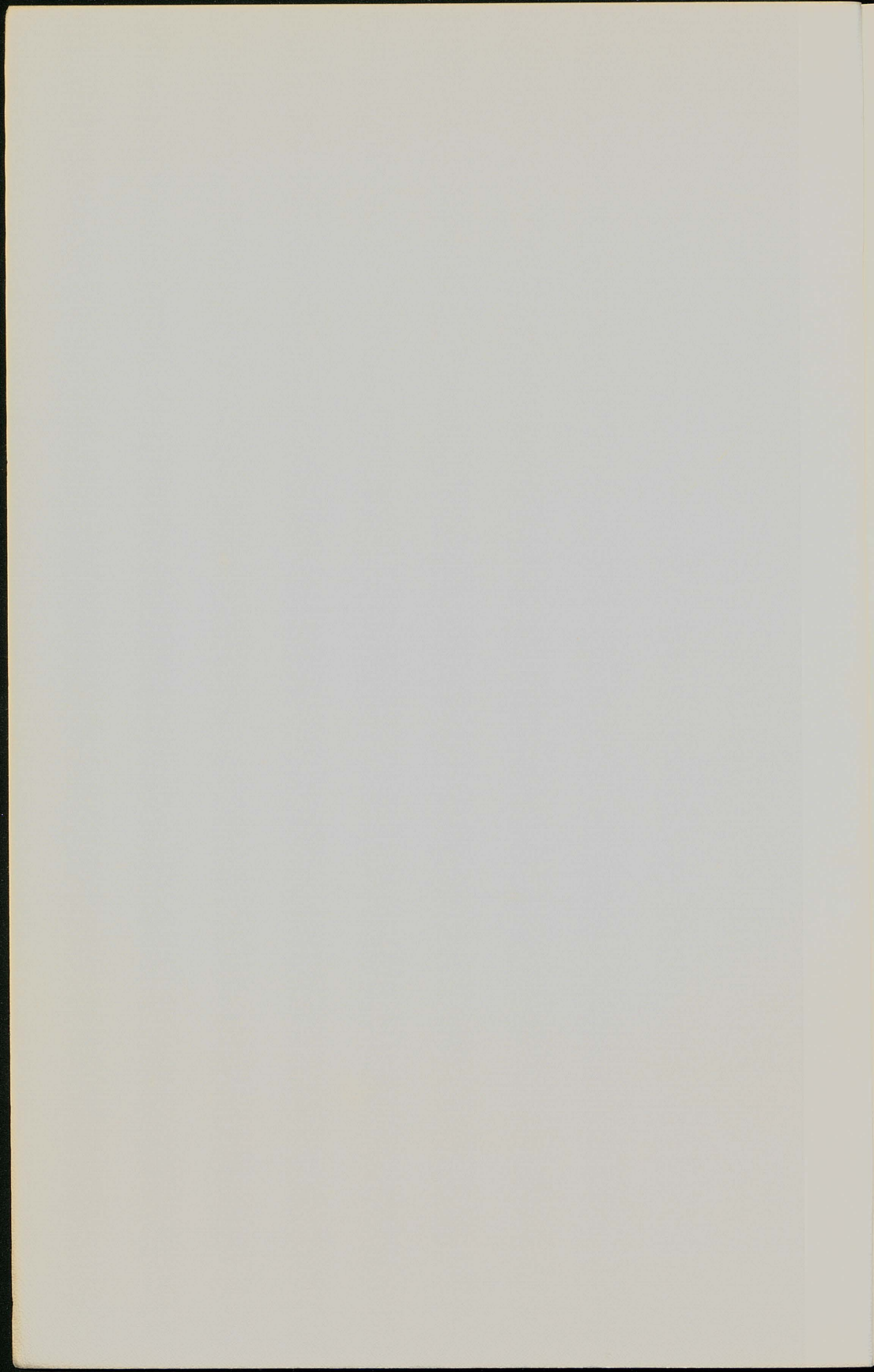
**JUNIOR COLLEGE**

**TYLER, TEXAS**

**ANNUAL CATALOGUE 1974-1975**

**ANNOUNCEMENT OF COURSES 1975-1976**







# TYLER JUNIOR COLLEGE

EAST FIFTH STREET

+ +

ANNUAL CATALOGUE

1974-1975

+ +

TYLER, TEXAS

AN EQUAL OPPORTUNITY EMPLOYER



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## GENERAL COLLEGE CALENDAR — 1974 - 1975

### ADVANCE REGISTRATION

The administrative offices are open throughout the summer for advance registration. Thorough and leisurely counseling is available on degree plans, technical courses and vocations. Students may arrange appointments from 8 a.m. until 3 p.m. Mondays through Fridays.

#### FALL SEMESTER

Advance Registration	June 3 - August 23
Evening School Registration	August 21 - 22
General Faculty Meetings	August 24 - 26
Day School Registration	August 27, 28, 29
Last day to register without paying late fee	August 29
First day of classes	September 3
Last day to change schedule	September 10
Last day to drop a course with a grade of X	October 25
Mid-semester grades due	October 25
Advance Registration for spring semester	October 28
Thanksgiving holidays	November 28 - 29
Beginning of final exams	December 12
Last day of Fall semester	December 20

#### SPRING SEMESTER

Evening School Registration	January 8 - 9
General Faculty Meeting	January 10
Day School Registration	January 13, 14, 15
Last day to register without paying late fee	January 15
First day of classes	January 20
Last day to change schedules	January 24
Last day to drop a course with a grade of X	March 14
Mid-semester grades due	March 14
Spring holidays (inclusive)	March 22 - 31
Beginning of final exams	May 7
Last day of spring semester	May 16
Commencement	May 16

#### SUMMER SESSION

Registration for First Term	May 30
Classes Begin	June 2
First Term Ends	July 11
Registration for Second Term	July 14
Classes Begin	July 15
Second Term Ends	August 22



# CAMPUS OF TYLER JUNIOR COLLEGE



## KEY

1. H. E. Jenkins Hall
2. Fine Arts
3. Wise Auditorium
4. Applied Arts Building
5. Potter Hall
6. Vaughn Library
7. Dining Hall
8. Student Center
9. Vaughn Hall

11. Gentry Gymnasium
12. East Hall
13. Wagstaff Gymnasium
14. Hudnall Planetarium
15. George W. Pirtle Technology Center
16. Center Hall
17. West Hall
18. Tax Office
19. Claridge Hall
20. Bateman Hall
21. Baptist Bible Chair
22. Church of Christ Bible Chair
23. Methodist Bible Chair
24. Presbyterian Bible Chair

## Board of Trustees

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\* \* \* \*

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Floyd Wagstaff, M.A.....	Dean of Health, Athletics, and Physical Education

\* \* \* \*



# FACULTY

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B.B.A., East Texas State University; M.B.A., Texas A&M University	
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B.B.A., M.B.A., The University of Texas - Austin	
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Ph.D., The University of Havana, Cuba	
Jacqueline Adams.....	Art
B.A., Centenary College; M.A., Stephen F. Austin State University	
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B.A., Texas A&M University; M.A., Southern Methodist University	
Arthur Allen.....	Electronic Data Processing
B.B.A., University of Texas - Austin	
Billy Wayne Andrews.....	Physical Education—Football Coach
B.A., Trinity University	
R. S. Austin.....	Education
B.S., M.S., Prairie View A. & M. College	
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B.A., Baylor University	
Elizabeth Baade.....	Home Economics
B.S., Stephen F. Austin State University	
Ray Bagwell.....	Government
B.A., Baylor University; M.S., East Texas State University	
Robert Ballard.....	History
B.A., Culver-Stockton College; M.S., Ph.D., East Texas State University	
James F. Barnes.....	Economics
B.A., Mississippi College; M.A., The University of Mississippi	
Lethan A. Barnes.....	English
B.S., M.A., Texas A&M University	
Harvey O. Beckendorf.....	Bible
Director, Methodist Bible Chair	
B.S., The University of Houston; M.Th., Perkins School of Theology	
Charles D. Bennett.....	Business Education
B.S., Southeastern State College, Okla.; M.S., Oklahoma State University	
Gladys Best.....	Music
B.M., M.A., Stephen F. Austin State University	
Floyd G. Betts, Jr.....	Radiologic Technology
B.S., Southwestern University - Georgetown; M.D., University of Texas Medical Branch - Galveston	
Jack W. Betts.....	Engineering Drawing, Drafting
B.S., M.Ed., East Texas State University	

## FACULTY (Continued)

Sue Betts.....	Library Assistant
B.S., M.Ed., East Texas State University	
Lawrence Birdsong, Jr.....	Speech, Drama
B.A., Baylor University; M.A., East Texas State University	
Gene Blakely.....	Business Manager
B.B.A., North Texas State University	
Howard E. Branum.....	Physics
B.S., M.Ed., Stephen F. Austin State University	
Ray Breedlove.....	Agriculture
B.S., Texas A&M University	
Edwin S. Brogdon.....	Dean of the Evening Division,
B.B.A., M.B.A., East Texas State University	
	Distributive Education
Richard Brown.....	Air Conditioning
B.A., St. Lawrence University	
Jean Browne.....	Chairman, Department of Speech and Drama
B.A., Mt. Holyoke College; B.A., Carnegie Institute of Technology;	
M.F.A., The University of Texas; Ph.D., State University of Iowa	
Julius Buchanan.....	Petroleum Technology
B.S., The University of Texas; M.S., East Texas State University	
Paula Buck.....	English
B.A., Texas A&I University; M.A., Stephen F. Austin State University	
Betty Burk.....	English
B.S., Sam Houston State University; M.A., Southern Methodist University	
Don S. Burket.....	Government
B.A., M.A., Austin College	
John Maxwell Burket.....	Geology
B.A., M.S., Baylor University	
Mary Burton.....	English
B.A., M.A., Sam Houston State University	
Arthur Byrd.....	Law Enforcement
B.S., Southwest Texas State University	
Dan E. Byrd.....	Dental Hygiene
D.D.S., Loyola School of Dentistry	
Noamie Ruth Byrum.....	English
B.A., M.A., Stephen F. Austin State University	
James W. Campbell.....	Mid-Management
B.B.A., Baylor University	
Merrill Cantrell.....	Electronic Data Processing
A.A., Tyler Junior College	
Lorace E. Catterson.....	Economics
B.S., Northwest Missouri State College; M.Ph., The University of Wisconsin	



## FACULTY (Continued)

- Charles J. Cavanaugh.....Chairman, Department of Art  
B.F.A., Louisiana College; M.A., North Texas State University;  
M.F.A., Stephen F. Austin University
- Louise Clinkscales.....Chairman, Department of  
Business Administration  
B.B.A., Baylor University; M.B.A., East Texas State University
- Robert Cole .....Biology  
B.S., Stephen F. Austin State University;  
M.S., Louisiana Polytechnic Institute
- Milford T. Collins.....History  
B.A., East Texas Baptist College; M.A., Stephen F. Austin State University
- Pat Jean Cook .....English  
B.A., M.L.A., Southern Methodist University
- Marjorie Coulter.....Physical Education  
B.S., Baker University; M.Ed., Stephen F. Austin State University
- Thomas William Cowart .....Nursing Laboratory  
Registered Nurse
- Dorothy Creekmore .....Business  
B.S., M.S., East Texas State University
- Felder Cullum.....Chairman, Behavioral Science  
Department, Psychology  
B.S., University of Maryland; M.Ed., Ed.D., North Texas State University
- Charles Cunningham .....Electronics  
FCC Licensed Radio-Television Engineer
- George Michael Cunningham .....Chemistry  
B.A., Howard Payne College; M.S., West Texas State University
- Loran Dailey.....Air Conditioning  
Technician
- Kenneth Dance .....Business  
B.B.A., Baylor University, Certified Public Accountant
- Marvin P. Davis.....Chairman, Department of Mathematics  
B.S., Lamar State College of Technology; M.A., Louisiana State University
- Milton O. Davis .....Bible  
B.A., Baylor University; M.Th., Southwestern Baptist Theological Seminary
- Fred T. Debenport.....Electronics  
B.S., University of Houston
- Marjorie DeBord.....Art  
B.S., Texas Woman's University; M.A., University of Southern California
- Charles E. Delese .....Recreation Leadership  
B.B.A., East Texas State University
- David Demic .....Mathematics  
B.A., Texas Technological College; M.A., The University of Texas - Austin

## FACULTY (Continued)

David Diller.....	Bible
B.A., Miami University - Ohio; M.Th., Perkins School of Theology	
Mary Ann Dodd .....	Vocational Nursing
Registered Nurse	
Billy Jack Doggett.....	Mathematics
B.S., M.Ed., Stephen F. Austin State University	
Dorothy Duncan.....	Mathematics
B.S., Northwestern State University of Louisiana;	
M.S., Stephen F. Austin State University	
Evelyn Marie Dusek.....	Home Economics
B.S., Sam Houston State University	
Elmer G. Ellis.....	Business
B.A., M.A., East Texas State University	
Linda A. Ellis .....	English
B.A., M.A., East Texas State University	
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B.A., Mississippi State College for Women; M.A., University of New Mexico	
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Kamill Fogarasi .....	German
B.A., M.A., Wayne State University, Michigan	
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B.S., M.S., East Texas State University	
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	Dean of Student Life
B.A., Baylor University; M.Ed., East Texas State University	
Frances Friedman .....	Director, Hudnall Planetarium
Irving L. Friedman .....	Academic Dean
B.S., East Texas State University	
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A.A., Tyler Junior College	
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B.A., University of Louisville; M.A., Columbia University	
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Robert Glover .....	History
B.A., M.A., Stephen F. Austin State University	
Cecil Greer .....	History
B.A., University of Miami; M.A., University of Georgia	
Forest Griffin .....	Dean, Department of Technology
B.S., M.S., East Texas State University	



## FACULTY (Continued)

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B.S., Stephen F. Austin University	
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B.S., East Texas State University	
Peggy Hall	Dental Hygiene
B.S., Baylor University	
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Licensed Master Electrician	
Pamela Kay Hankins	Business
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B.S., North Texas State University	
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Registered Nurse	
Charles Hayden	Veterans Counselor
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John Head	Biology
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Royce Ann Heard	Mathematics
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Wayne Hill	Physical Education, Assistant Football Coach
B.S., M.Ed., Sam Houston State University	
Barbara J. Hiltcher	Nursing
Registered Nurse	
Lynette Hobbs	Medical Technology
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Florence Jan Hogenmiller	Vocational Nursing
Registered Nurse	

## FACULTY (Continued)

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B.S., The University of Mississippi; Ph.D., The University of Texas	
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B.M., M.M., North Texas State University	
Wynoma Johnson .....	Art
B.A., East Texas State University	
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Karen A. Johnston .....	Dental Hygiene
B.S., Baylor University Caruth School of Dental Hygiene	
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B.A., M.L.S., Texas Women's University	
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Mus.B., Mus.M., Yale University	
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Jerry Leard .....	Assistant Academic Dean
B.M., Stephen F. Austin State University; M.Ed., The University of Texas - Austin	



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B.S., M.A., North Texas State University	
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B.S., Texas A&M University; M.S., East Texas State University	
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B.S., Portland State College; M.S., Eastern New Mexico University	
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B.J., University of Texas - Austin; M.A., East Texas State University	
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A.B., Wiley College; M.A., University of Michigan	
Nancy A. Lynn.....	Dental Assisting
Certified Dental Assistant	
Jefferson H. Martin.....	Mathematics
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Jo Ann Martin.....	X-Ray Technology
Registered Radiologic Technologist	
Verna Martin.....	Assistant Librarian
B.A., Texas Women's University	
Walter McCormack, Jr.....	Recreation Leadership
B.S., Ashland College	
Loretta McGehee .....	English
B.A., Southern Methodist University; M.A., East Texas State University	
Evelyn McManus .....	Librarian
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Mary Jane McNamara.....	Library Assistant
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Donna Miller.....	Nursing
Registered Nurse; B.S., Saint Mary of the Plains College	
H. F. Mills.....	History
B.A., M.A., Rice University	
Randall Milstead.....	Physical Education
B.A., M.Ed., Stephen F. Austin State University	

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B.Ph., University of Chicago; B.M., M.M., American Conservatory of Music	
Grace S. Mueller .....	Music
B.M., M.M., American Conservatory of Music	
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Registered Nurse; B.S., Texas Christian University	
James Murray, Jr. ....	English
B.A., Baylor University; M.A., The University of Texas	
Gayle Nafus .....	Nursing
B.S., Mary Hardin - Baylor College	
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B.A., East Texas State University	
Ragna Neill .....	Nursing Laboratory
Registered Nurse	
Shirley Ann Neptune .....	Dental Hygiene
Dental Hygienist	
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Willie Lee Palmore .....	Biology
B.S., North Texas State University; M.S., East Texas State University	
Jerry Parker .....	Business
J.D., South Texas College of Law	
Judith Ann Parks .....	Biology Laboratory
B.A., Houston Baptist College	
Ronald Patschke .....	Mathematics
B.S., M.A., Southwest Texas State College	
Adrian J. Peddy .....	Geology
B.S., Texas Technological College; M.S., East Texas State University	



## FACULTY (Continued)

Mary W. Peddy.....	Counselor
B.S., Mississippi State College for Women; M.Ed., Mississippi State University	
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B.A., Texas Technological College; M.S., East Texas State University	
Robert K. Peters.....	History
B.A., Texas Christian University; M.A., Stephen F. Austin State University	
Charles D. Pickens, Jr.....	Real Estate Management
B.B.A., Texas Tech University	
Kemil Pilotte.....	Respiratory Therapy
B.S., University of Texas - Arlington	
Birdie Porter.....	Psychology
B.S., M.S., East Texas State University	
Billy Joe Power.....	Business
B.A., M.A., North Texas State University; M.B.A., University of Kansas	
Jacqueline Power.....	Mathematics, Physics
B.A., North Texas State University	
Emma Lou Prater.....	Business
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Blanche Prejean.....	English, Journalism
B.A., Texas Wesleyan College; M.A., Stephen F. Austin State University; Ph.D., The University of Texas - Austin	
Kenneth Pruitt.....	Chemistry
B.S., University of Texas - El Paso; M.L.A., Southern Methodist University	
Esten Ray.....	Police Training
B.S., Stephen F. Austin State University	
Harley M. Revier.....	Inhalation Therapy
B.A., Midwestern University	
Jackie Richards.....	Nursing
B.S., University of Texas School of Nursing; M.P.H., University of Texas at Houston School of Public Health	
Herbert L. Richardson.....	Counselor
B.S., M.Ed., University of Houston	
Joann Richardson .....	Business
B.B.A., University of Houston	
Larry M. Roberts .....	Economics
B.S., Ohio State University; M.S., Oklahoma State University	
Judy Robertson .....	Counselor
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Carol T. Robinson.....	Air Conditioning
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## FACULTY (Continued)

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- Thomas G. Robinson ..... Social Science  
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- Marcella Roddy ..... Radiologic Technology  
Technician
- Earl F. Rucker ..... Agriculture  
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- Leo Rudd ..... Education-Psychology  
B.A., William Jewell College; M.S., East Texas State University
- John T. Saleh, Jr. .... Business Administration  
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- Mack Samford ..... Mid-Management  
B.S., The University of Texas - Austin
- Martin Z. Sammons, Jr. .... Business  
L.L.B., Baylor University
- I. C. Sanders ..... Laboratory Instructor  
B.A., Rice University; M.A., The University of Texas
- Eva Saunders ..... Dean of Women, Director of  
the Apache Belles  
A.B., Baylor University; M.A., The University of Texas
- Ann Scruggs ..... Home Economics  
B.S., Sam Houston State University; M.Ed., East Texas State University
- Jacquelyn Shackelford ..... Speech  
B.S., M.S., East Texas State University
- Kathleen Shackelford ..... Medical Laboratory Technology  
B.S., Stephen F. Austin State University
- Marion L. Shilling ..... Business  
B.S., Northwestern State College of Louisiana, Certified Public Accountant
- Jarrell T. Shortes ..... Government  
B.S., North Texas State University; M.A., West Texas State University
- Wallace Shuttlesworth ..... Business  
B.B.A., East Texas State University
- Thomas Simmons ..... Biology  
B.S., M.S., Mississippi State University
- Adrienne P. Smith ..... Dental Hygiene  
Dental Hygienist
- Jack C. Smith ..... Band Director, Music  
B. Music, Stephen F. Austin State University
- Tom Smith ..... Dental Hygiene  
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Dentistry; D.D.S., University of Texas Dental Branch

## FACULTY (Continued)

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Gary Smithey .....	Physical Education
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Mahlon Soileau.....	French, and Chairman Department
B.A., M.A., University of Southwestern Louisiana;	of Foreign Languages
French Language Certificate, University of Paris	
Charles Sowders.....	Drafting and Advertising Arts
B.S., Sul Ross State College	
Neville Spiers.....	Physical Education, Assistant Football Coach
B.S., North Texas State University	
Linda Spittler.....	Radiologic Technology
Technician	
Gilbert H. Stafford .....	Air Conditioning
Technician	
Carole Stanley .....	Business
B.S., East Texas State University	
B. Joe Staples.....	Business, and Chairman
	Department of Secretarial Studies
B.S., M.S., East Texas State University	
James H. Stewart.....	Bible
	Director, Presbyterian Bible Chair
B.S., University of Georgia; M.Div., Reformed Theological Seminary	
Katie A. Stewart.....	English
B.S., Prairie View State College; M.A., Atlanta University	
George Stiles .....	Biological Science, and Chairman
B.S., Sam Houston State University;	of Department of Science
M.A., Colorado State College of Education	
Clarence Strickland .....	Speech
B.S., M.S., East Texas State University	
Hubert L. Stripling.....	Biology
B.S., Louisiana Polytechnic Institute; M.S., Florida State University	
Gerald L. Stuck .....	Air Conditioning
Technician	
Mary Stuck .....	Vocational Nursing
Registered Nurse	
Brady Swinney.....	Dental Hygiene
D.D.S., University of Texas Dental Branch	
Dolores Tash .....	Nursing
B.S., Northwestern State College	
Kalman Taxon .....	Art
B.F.A., Ohio State University	



## FACULTY (Continued)

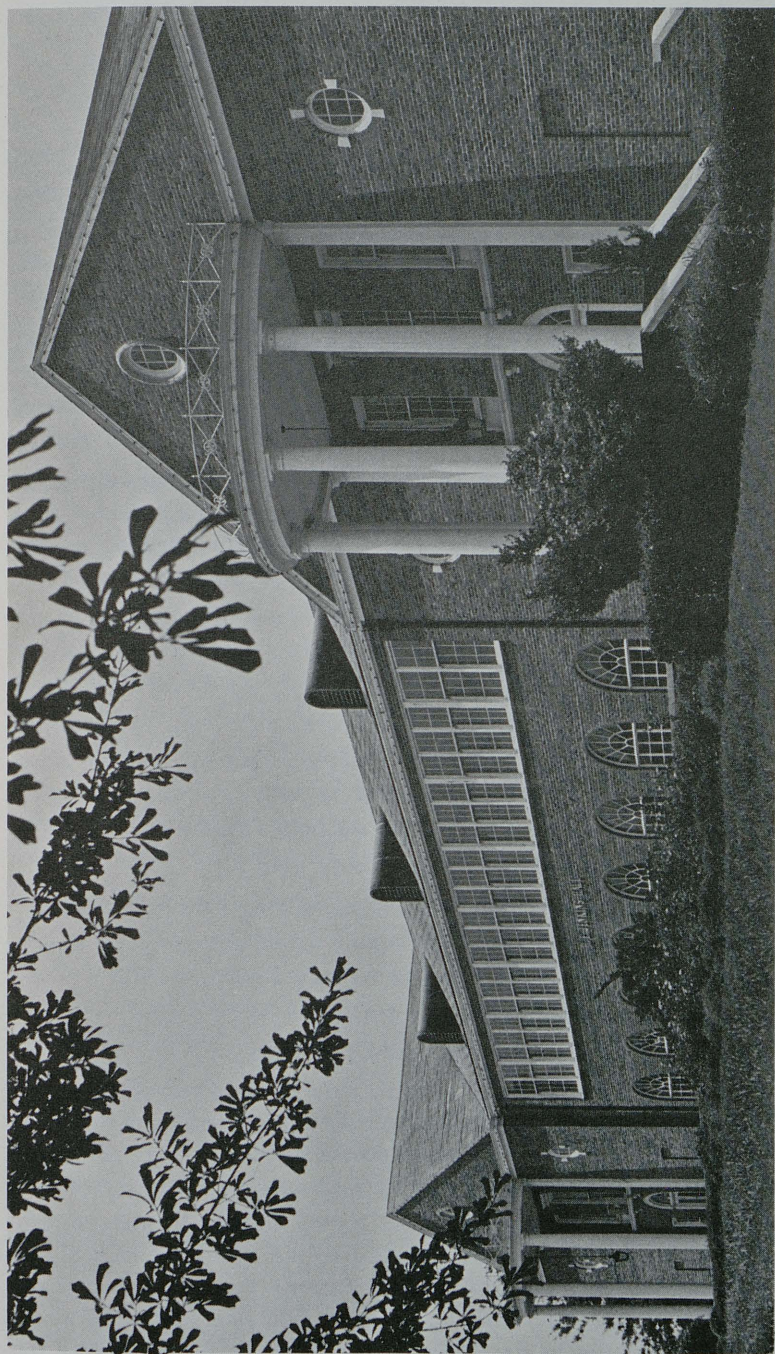
Everett Taylor.....	Journalism
B.A., Baylor University	
Lavern H. Taylor.....	English
B.A., Sam Houston State University; M.A., Stephen F. Austin State University	
George B. Tefteller.....	Mathematics
B.S., M.S., East Texas State University	
Richard Thedford.....	Drafting
B.S., East Texas State University	
Al D. Thigpen.....	Real Estate Management
B.S., East Texas State University	
William L. Thomas.....	Vocational Counselor
B.S., East Texas State University	
Price Thrall.....	Psychology, Sociology
B.S.Ed., Arkansas State Teachers College; M.S., East Texas State University	
Frank S. Tietz.....	Supervisor, Dental Clinic
D.D.S., University of Texas Dental Branch	
Patsy Tiller.....	Nursing
Registered Nurse, B.S., Baylor University	
Thomas Tooker.....	Director of Counseling and Guidance
A.B., University of Wichita; M.Ed., Texas A&M University	
Preston Triplett.....	Business
B.B.A., Stephen F. Austin State University, Certified Public Accountant	
Clara Usrey.....	Nursing
Registered Nurse, B.S., University of Texas Medical Branch - Galveston	
Eileen Vanderlee.....	Business
B.S., Oklahoma State University, M.B.A., University of Chicago	
Floyd Wagstaff.....	Dean of Health, Athletics, and Physical Education and Head Basketball Coach
B.S., Stephen F. Austin State University; M.A., North Texas State University	
Pamela Waites.....	Dental Hygiene
B.S., Baylor University	
Mary Frances Waldrop.....	English, and Chairman Department of English
B.A., M.A., Austin College	
Louise Walker.....	English
B.A., M.Ed., Stephen F. Austin State University	
Charline H. Wallis.....	Art
B.A., M.A., Stephen F. Austin State University	
Jerome Walsh.....	Foreign Language
B.A., Mexico City College; M.A., Stephen F. Austin State University	
Julia Warren.....	Assistant Librarian
A.B., Wiley College; M.S., North Carolina College at Durham	



## FACULTY (Continued)

Nell F. Warren.....	Mid-Management
B.B.A., Sam Houston State University	
Michael G. Watkins.....	Government
B.A., M.A., The University of Texas	
Joy Watson.....	Psychology - Sociology
B.A., M.A., East Texas State University	
Stanley H. Watson.....	History
B.S., M.A., Stephen F. Austin State University	
Sara Welch.....	Dental Hygiene
Dental Hygienist	
John Richard Wheat.....	Mathematics
B.A., Stephen F. Austin State University; M.S., University of Mississippi	
Richard Whipple.....	Physics, Mathematics
B.S., M.S., University of Houston	
Charles H. White, Jr. ....	Business
B.S., Texas Christian University	
James David Wicks.....	Chemistry
B.S., M.A., Southwest Texas State College	
Hazel Wilson .....	Nursing
B.S., University of Rochester	
James W. Wise .....	Physical Education
Member, Professional Golf Association	
Douglas Witte.....	Dental Hygiene
M.S., D.D.S., The University of Texas	
Clyde Wolford .....	Music
B.S., University of Pittsburg	
Audrey Woods.....	Physical Education
B.S., Texas Southern University; M.Ed., East Texas State University	
Fred A. Wright, Jr.....	Mathematics
B.S., Florida Southern College; M.A., Duke University	
John P. Wright.....	Speech
B.S., M.S., East Texas State University	
Gladys Wylie .....	English
B.A., Rice University; M.A., Stephen F. Austin State University	
Jimmy D. Yancy .....	English
B.A., M.A., Stephen F. Austin State University	
Myra York .....	Assistant to the Evening College Dean
Radiance Young .....	English
B.S., Sam Houston State University; M.A., George Peabody College	
Vivian Young .....	Nurse
Registered Nurse	





H. E. JENKINS HALL

## THE HISTORY AND DEVELOPMENT OF TYLER JUNIOR COLLEGE

The original Tyler Junior College was established in 1926 as a part of the Tyler Public School System. It operated under this plan with a small enrollment until September 1, 1946.

On November 13, 1945, the voters established a new, independent Tyler Junior College District, authorized a tax levy for the support of the college, and authorized a bond issue for the erection of a new college plant on its own campus, separating it from the public school system on September 1, 1946.

Since then the Tyler Junior College District has been enlarged and extended by ten neighboring school districts which voted to become a part of the College District for junior college purposes only. The present Tyler Junior College District is now composed of the following districts:

The Tyler Independent School District.

The Winona Consolidated Rural High School District No. 67.

The Chapel Hill Independent School District.

The Lindale Independent School District.

The Rice Consolidated Common School District No. 13.

The Dixie Rural High School District No. 5.

The Swan Consolidated Common School District No. 60.

The Pine Springs Common School District No. 48.

Flint Common School District No. 18.

Van Independent School District.

Grand Saline Independent School District.

The College is operated under statutory authority by its Board of Trustees, composed of nine members.

Students residing in the Tyler Junior College District are entitled to priority in enrollment. Others are admitted if facilities are available, but the College reserves the right to limit the enrollment of students residing outside the Tyler Junior College District whenever in its judgment facilities are not available for additional students.



## GENERAL INFORMATION

### STATEMENT OF PURPOSE

Tyler Junior College recognizes the responsibility to offer educational opportunities at minimal cost to students varying in interests, aptitudes, talents, needs and goals. It offers equal opportunity to all students meeting admissions requirements. Specific objectives include the following:

**Educational:** To provide two years of fully transferable college credit courses designed to develop logical, creative, and objective thinking, and to stimulate intellectual curiosity by exposing students to the various academic disciplines;

To provide two-year technical programs in order to prepare students to gain occupational competency as technical personnel in industry, business, government, or as owner-operators of their own establishments;

To provide programs of vocational education for employed adults who need additional training or re-training in order to increase occupational competency.

**Cultural:** To cultivate the knowledge and appreciation of human achievements in the arts and sciences by providing convocations, by offering elective and adult education courses that stimulate interest in the arts, and by encouraging students to participate in cultural activities.

**Social:** To encourage the exercise of friendliness and other social virtues by providing opportunities for students to gather at conveniently located student lounges and by offering a well-planned, diversified program of extra-curricular activities, planned and implemented by both the student body and the faculty.

**Civic:** To encourage effective student government in order to create in each student an intelligent interest in the governmental processes, and to prepare him for responsible citizenship. The community is also encouraged to use the facilities of the college.

**Physical:** To provide programs of physical development and of competitive sports in order to encourage good habits of physical and mental health, and to stimulate interest in recreation and good sportsmanship.

**ACCREDITING.** The Tyler Junior College is a member of the Southern Association of Colleges and Schools for the Southern States.

Membership in this accrediting association makes possible the transfer of credit for work done in Tyler Junior College to other colleges and universities.

Since colleges differ in their curricula, a student should secure the catalogue of the institution to which he intends to transfer credit. Courses for his first two years should be planned in accordance with the degree plan of the institution to which he will transfer.

**ADMISSION.** Registration for the fall semester begins in June and continues daily throughout the summer. By this system the student is assured of thorough and leisurely counseling on degree plans and personal problems.

Students will avoid delay in registering by sending a transcript of credits from the high school or college last attended.

#### **Immunization Requirement**

Under the statutes of the State of Texas as signed into law in 1971, students enrolling in Tyler Junior College must meet immunization requirements as follows:

1. Applicants for admission under 19 years of age must produce a certificate from a physician licensed by the Texas State Department of Health of immunization against poliomyelitis showing at least one dose since the fourth birthday.
2. All applicants for admission must produce a certificate from a physician licensed by the Texas State Department of Health giving the dates of immunization against diphtheria and tetanus showing that at least one dose was received within the past ten years.

#### **Methods of Admission**

1. Admission by Graduation from High School.

Graduation from a standard high school with at least fifteen units of high school credit, including three units in English, is required. The elective units must be chosen from the list approved by the Texas Education Agency.

2. Admission by Examination.

Mature students who are not graduates of a high school may absolve the deficiency by taking examinations.



### 3. Admission of Transfer Students.

Students may be accepted on transfer from other regionally accredited colleges and universities when eligible to return to their former institutions.

A student seeking to transfer to Tyler Junior College must:

a. Present a complete transcript, bearing impress of seal and signature of college official. The document should include the previous admission record and evidence of honorable dismissal.

b. Continue on scholastic probation at Tyler Junior College if he has been placed on probation at another institution.

c. Not seek to be admitted to Tyler Junior College if he is on enforced scholastic withdrawal from another institution. Residents of the Tyler Junior College District may apply to the Academic Dean for special consideration.

Transfer students will have credit recognition to a maximum of forty-five semester hours toward an appropriate Tyler Junior College degree on work averaging one grade point per semester hour on a three point system.

Such students may earn an appropriate Tyler Junior College degree by doing the last fifteen semester hours or more in Tyler Junior College with a C average.

A student transferring from another collegiate institution is not at liberty to disregard his collegiate record and apply for admission on the basis of his high school record or a part of his college record.

### 4. Special Admission.

A limited number of special adult students are admitted to evening classes upon individual approval.

### 5. The American College Testing Program Admission Requirement.

All regular beginning freshmen students (including those with up to 15 semester hours) must submit scores of the American College Testing Program. No other scores are acceptable in substitution. The scores are used for counseling and placement purposes.



It is the student's responsibility to see that these scores are reported to the Registrar well in advance of actual enrollment. Students who were not able to take the tests, however, are required to do so after arrival on the campus.

The American College Testing Program tests are scheduled for October 14, 1974; December 14, 1974; February 22, 1975; April 26, 1975; and June 21, 1975 at Tyler Junior College and other conveniently located centers in Texas and elsewhere. A list of them will be found in the student Information Bulletin of the American College Testing Program testing service. Such information booklets and registration forms as well as the 1974-75 testing dates may be obtained from high school or college counselors or Registrars.

Transfer students with less than fifteen semester hours of credit must submit the American College Testing Program scores.

## Registration and Withdrawal Regulations

**Responsibility for Admission Requirements.** The student himself is responsible for meeting all admission requirements including furnishing the necessary transcripts of his work. His failure to meet all requirements within a reasonable period of time after registration may cause him to be placed on non-credit status in all work for which he has been enrolled.

**Late Registration.** Students should register at the scheduled times in order to have the widest choice of courses and to make the registration procedure more uniform. With approval of the Academic Dean or the Dean of the Evening Division, a student may be permitted to enroll after the scheduled period, but a late registration fee of \$10.00 will be charged.

**Adding and Dropping Courses.** After the beginning of classes, adding or changing of courses will be approved only for the most pressing of reasons such as change of degree plan, conflict of classes, etc. The final date for such changes is the last day of the first week of classes. Application for such changes is made in the Registrar's office.

**Quantity of Work Rule.** The standard amount of credit work for each student in the regular session is fifteen or sixteen hours a semester exclusive of physical activity courses.

The standard amount of credit work for each student in the summer session is six hours a summer term.

**Withdrawals.** A student desiring to withdraw from school must submit a withdrawal petition to the Registrar's Office.

**Attendance.** Regular class attendance is fundamental for the success of the student; therefore, a student must report promptly and regularly to all classes. Failure to do so is cause for dropping the student from the rolls.

**Guidance and Counseling.** The college offers an extensive program in testing, guidance and counseling, under the supervision of the Director of Guidance and Counseling.

**Academic Probation.** Students failing to make minimal normal progress in their scholastic programs will be placed on probation the following semester. Failure to remove the classification may call for academic suspension.

Minimal progress is defined as follows:

A regular student must earn nine semester hours and nine grade points per semester on the three point system during his first two semesters or until sophomore standing is achieved. Following this the student must earn twelve semester hours and twelve grade points per semester. The student carrying less than four courses must pass all work with a grade point average of one on the three point system.

Students placed upon academic suspension may routinely apply for readmission after remaining out at least one semester. Such students suspended at the end of the spring semester may be granted readmission in good standing the following fall semester, provided they have done at least twelve semester hours with a C average in the intervening summer term.

Students suspended for scholastic reasons may appeal their suspension to a special Admissions Committee composed of the Academic Dean and a member of the counseling staff.

Extended probationary standing may be granted when the Committee is convinced that extenuating circumstances have been present.

**Grades and Reports.** Students or parents receive grade reports every nine weeks. The standing of the student in each course is



determined by his class performance and by regular examinations. Two hours is considered a reasonable amount of time for average students to spend in preparation for each hour of class work.

Students' grades may be interpreted as follows:

A Excellent	X Official drop while passing
B Good	XF Official drop while failing
C Average	Q Unofficial drop
D Poor	W Official withdrawal from
E Conditional*	college while passing
F Failure	WF Official withdrawal from
I Incomplete**	college while failing

\*A student making E will be permitted to remove the condition by a second examination within a semester.

\*\*An incomplete must be made up within the following semester. After this time it is changed to F.

**Numbering of Courses.** One semester hour represents one class hour per week for four and a half months; for example, one course meeting three hours a week for nine months carries credit of six semester hours.

Courses are numbered as follows (except in nursing): The first digit of the number indicates the college year in which the course is taken; the second digit in the number indicates the semester of the year in which the course is taken; the final digit indicates the credit value of the course in semester hours; thus, English 123 indicates that the course is the first year, second semester English with a credit value of three semester hours. The addition of a lower case letter indicates that the course is taught in two or more divisions.

In the case of courses offered only in the summer the number 3 as the middle digit indicates the first summer term. The number 4 indicates the second term. The course number 143 therefore indicates a freshman level subject normally taught in the second summer term for three hours credit.

All descriptive titles of courses are followed by two numbers in parenthesis. The first of these numbers gives the number of class meetings each week while the second number gives the number of hours of laboratory each week. For example, the notation (3-2) indicates that a course has three class meetings and two hours of laboratory weekly.

**Transfer to Other Institutions.** Since colleges differ in their curricula, a student should secure the catalogue of the institution to which he intends to transfer credit. Courses for his first two years should be planned in accordance with the degree plan of the institution to which he will transfer.

**Student Load.** Except by special permission from the Academic Dean, a student will not be permitted to register for fewer than four or more than five courses.

## Graduation, Degrees and Certificates

The college awards the Associate degree in the fields of liberal arts, applied arts, business administration, engineering, and science to those who complete the requirements as set forth for the particular degree desired and who make proper application to the Registrar for that degree.

For graduation transfer students must maintain a C average on all work attempted at Tyler Junior College.

For graduation the last fifteen semester hours must be completed in Tyler Junior College.

Students who graduate are required to attend the commencement exercises unless excused.

**Associate in Arts Degree.** Students who complete specified liberal arts or pre-professional requirements for graduation receive the Associate in Arts Degree. Students must complete sixty semester hours of work (exclusive of physical training and Psychology III) with an average grade of at least C.

The sixty semester hours should include twelve hours in English, six in United States History, six in government, and at least fifteen hours of sophomore rank; however, the degree will be granted to any student completing any required sixty hours of a baccalaureate degree plan, provided Government 213-223, English 113-123, United States History 213-223, and the required physical training, are included and the general average is at least C.

**Associate in Business Administration Degree.** The degree of Associate in Business Administration is conferred upon students who complete with a C average programs in the secretarial studies as outlined in this catalogue on pages 62 - 65.



**Associate in Science Degree.** The degree of Associate in Science is conferred upon students who complete the minimum of sixty required hours (exclusive of physical training and Psychology 111), combining liberal arts with Nursing. The degree is also conferred upon students completing the program in Dental Hygiene as outlined on page 164 of this catalog.

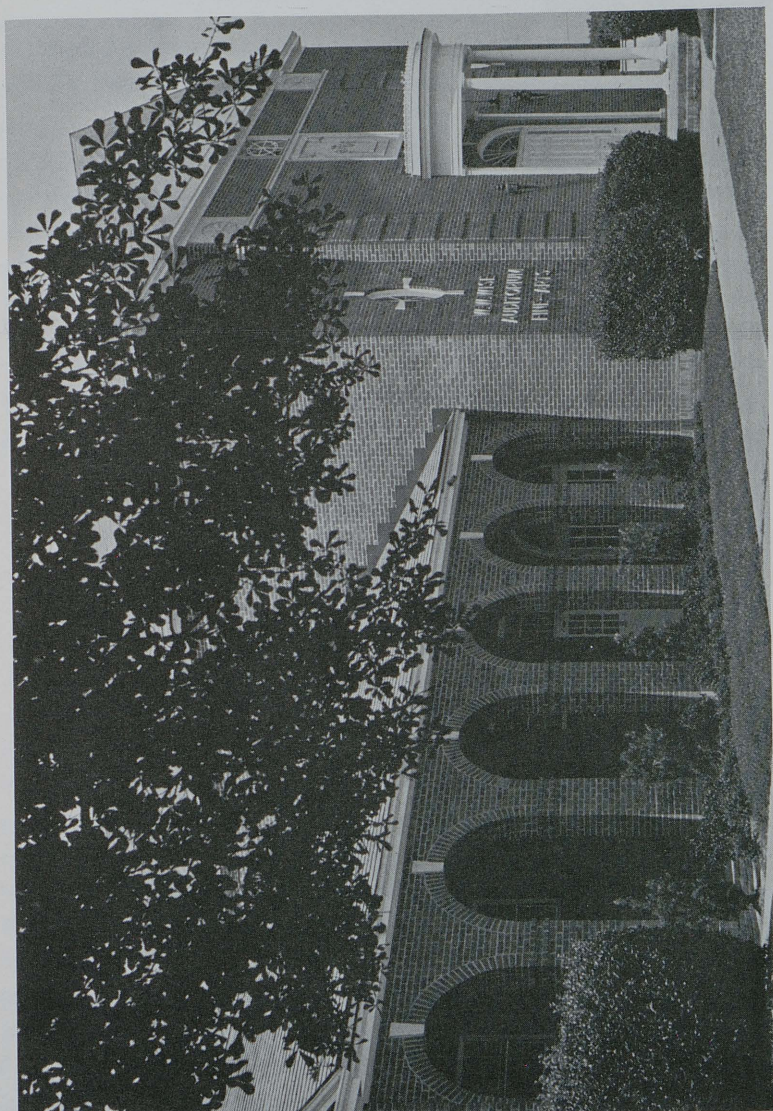
**Associate in Applied Science Degree.** This degree is granted to students who complete with a minimum of a C average programs in Medical Laboratory Technology, Medical Record Technology, Radiologic Technology, Respiratory Technology, Air Conditioning and Refrigeration, Drafting, Electronics, Electronic Data Processing, Farm and Ranch Management, Fire Protection Technology, Graphic Communications, Law Enforcement Technology, Mid-Management, Nursing Home Administration, Ophthalmic Technician and Dispenser, Petroleum Technology, Real Estate Management, Recreation Leadership, or Surveying as outlined on pages 167 - 195 in this catalog.

**Proficiency Certificates.** Students who satisfactorily complete certain courses of a vocational nature or those who satisfactorily complete technological courses without taking liberal arts courses for a degree are awarded certificates of proficiency.

**Physical Education Requirements.** Participation in physical education activity is required of all freshmen in Tyler Junior College. However, most degree plans require two years of such courses and most students elect to meet this requirement in Tyler Junior College.

Substitution of participation in the Apache Band or Belles or intercollegiate athletic squad training during the season of the sport is allowed.

**Psychology 111 Requirement.** All beginning freshmen are required to enroll in and attend the college orientation course Psychology 111.



WISE AUDITORIUM



## Buildings and Facilities

The Tyler Junior College occupies a 76-acre campus upon which many modern buildings, primarily of colonial architecture, have been erected.

**H. E. Jenkins Hall.** Many of the academic classes are held in this building and in it also are located the business offices, laboratories, and various special rooms.

**Potter Hall.** This modern building includes offices, classrooms, laboratories and special facilities.

**Wise Auditorium - Fine Arts Building.** This building, erected from the proceeds of a bond issue and a substantial gift from the Hon. Watson W. Wise, includes an auditorium of surpassing beauty, in addition to special rooms for music, art, drama, and speech arts.

**George W. Pirtle Technology Center.** These buildings include special classrooms and laboratories for instruction in advertising arts, air conditioning and refrigeration, dental hygiene, drafting, electronics, electronic data processing, petroleum technology, photography, surveying, and other technical courses.

**Applied Arts Building.** This building contains the drama workshop, art classrooms, and various maintenance and utility facilities.

**Student Center Building.** The College Bookstore, Snack Bar, student life offices, student recreational facilities, student lounges, and College Dining Hall are housed in this building.

**Brady P. Gentry Gymnasium.** This is a modern gymnasium for women.

**Floyd Wagstaff Gymnasium.** This building provides modern facilities for a thorough program in physical fitness and for athletic activities as well as general programs. It has a seating capacity of 3000.

**Hudnall Planetarium.** This building houses one of the largest planetariums in Texas as well as special facilities for space education.

**Powell Building.** This building provides classrooms, laboratories, offices, and other facilities for instruction in the allied health occupations.

**Genecov Building.** This building, due to open in the Spring of 1975, will provide facilities for laboratory sciences, art, and home economics classes, as well as offices for the teachers of those subject areas.

**Edgar H. Vaughn Memorial Library.** This learning resources center houses the Library; a complete Audio Visual Aids department with production facilities, both audio and video; and an ultra - modern computer controlled dial - access information retrieval center. Two hundred electronically equipped study carrels provide the student with instant audio and/or video channels to basic or enrichment information in his courses.

**Library.** An excellent reference library consisting of more than 44,000 volumes is housed in the learning resources center. A competent staff of service librarians constantly seek to help the student in his use of this facility.

**The Tyler Museum of Art.** This beautiful structure of latest museum design is operated through the cooperation of the Junior League of Tyler and the Tyler Junior College.

## Student Housing

**Reservations.** Students wishing to make dormitory reservations should write to the Dormitory Director, Tyler Junior College, requesting an official application blank for this purpose. It must be accompanied by a deposit of \$150.00 for college dormitories or \$250.00 for private dormitories.

Students will be notified by mail of the date upon which they should arrive and the supplies which they should bring.

Students accepting college dormitory housing must agree to occupy it for at least one academic year.

**Dining Hall.** Students living in the dormitories are permitted to take their meals in the College Dining Hall.

**Dormitories.** Three college-owned modern air-conditioned dormitories for men and two for women are maintained. In addition, two private dormitories for women adjoin the campus. Tyler Junior College cooperates with these privately owned and privately operated dormitories.

**Lillye Mae Vaughn Hall.** This women's residence hall was erected in 1958 and furnished through the generosity of Dr. and Mrs. Edgar H. Vaughn. It accommodates 48 women.

**Lois Holley Hall.** This dormitory, completed in 1969 and named in memory of Mrs. Lois Holley, houses 64 women.

**Claridge Hall.** This privately owned dormitory for 90 women is operated under the same regulations and general supervision of Tyler Junior College.

**Bateman Hall.** This privately owned dormitory for 166 women



is operated under the same regulations and general supervision of Tyler Junior College.

**East Hall.** 32 men are accommodated in this dormitory.

**Center Hall.** Facilities for 48 men are provided.

**West Hall.** Facilities for 48 men are provided.

**Inspection of Facilities.** In the interest of the enforcement of rules and regulations, Tyler Junior College reserves the right to inspect student housing at any time.

#### **DORMITORY RATES \***

**Holley (Women), Vaughn (Women),  
Center (Men), and West Halls (Men)**

The room rent is \$150.00 per semester, payable in advance. For a confirmed reservation, the \$150.00 room rent must be submitted with the application.

#### **Claridge Hall (Women), Bateman Hall (Women)**

Privately owned and privately operated, these two dormitories are adjacent to the campus and operated under College regulations. The room rent is \$250.00 per semester. For a confirmed reservation, a \$150.00 payment must accompany the application. The balance of \$100.00 for the room rent is payable upon moving into the dormitory.

#### **DINING HALL ARRANGEMENTS \***

Dormitory students will have the choice of (1) eating in the Dining Hall by purchasing a meal ticket in advance each month or (2) eating elsewhere.

Meal tickets good for a full month may be purchased at the College Business Office at a charge of \$70.00, plus \$3.50 tax. This monthly ticket is good for three meals a day, except on Sunday when no evening meal is served.

A meal ticket for lunch only may be purchased at \$35.00 per month, plus \$1.75 tax.

Meal tickets may be purchased by any student enrolled in Tyler Junior College.

### **Dormitory Holidays and Dining Hall Holidays**

**Thanksgiving Holidays.** All dormitories will close November 27, 1974. They will reopen Sunday, December 1, 1974.

\* Rates are subject to change.

The dining hall will close following the noon meal November 27, 1974. It will reopen for breakfast Monday, December 2, 1974.

**Christmas Holidays.** The dormitories will close Wednesday, December 18, 1974. They will reopen Sunday, January 12, 1975.

The dining hall will close following the noon meal Wednesday, December 18, 1974. It will reopen for breakfast Monday, January 13, 1975.

**Easter Holidays.** The dormitories will close Friday, March 21, 1975. They will reopen Monday, March 31, 1975.

The dining hall will close following the noon meal Friday, March 21, 1975. It will reopen for breakfast Tuesday, April 1, 1975.

## Tuition and Fees

Tuition rates in Tyler Junior College are low, since the college is partially supported by the State of Texas. Tuition is due in full at the beginning of the semester. Any other plan must be by special arrangement with the Business Manager. An additional fee of \$10.00 is charged for late registration — enrollment after the regularly scheduled registration days.

All tuition and fee charges are subject to change by the Texas State Legislature.

### Residents of the TJC District

Tuition: \$4.00 per semester hour with a minimum total tuition charge of \$25.00

### Texas Residents from outside of the TJC District

Tuition: \$4.00 per semester hour with a minimum total tuition charge of \$25.00

Surcharge fee: \$3.00 per semester hour

### Non-Texas Residents

Students whose residence is outside the State of Texas, and who are thereby classified as non-resident students according to the definition provided by the statutes of the State of Texas, are charged a special non-resident tuition rate.

Tuition: \$25.00 per semester hour to a maximum of \$200.00

Surcharge fee: \$3.00 per semester hour to a maximum of \$45.00

### Special Fees:

1. In accordance with the requirements of the statutes of the State of Texas, students are charged a semester laboratory fee of \$2.00 in each natural science or Home Economics course.



2. The Dental Hygiene program has a semester rental fee of \$40.00.

3. A rental fee of \$15.00 per semester is charged in the Electronic Data Processing program for one or more laboratory courses.

4. A fee of \$10.00 is paid by students at the time of graduation.

5. Music fees per Semester — Individual lessons

	Regular Students Who Enroll for 12 Sem. Hours or More		Special Students Who Enroll for Music Only	
	One 30-min. Lesson Per Week	Two 30-min. Lessons Per Week	One 30-min. Lesson Per Week	Two 30-min. Lessons Per Week
Piano.....	\$50.00	\$75.00	\$90.00	\$180.00
Voice.....	50.00	75.00	90.00	180.00
Violin, Violoncello.....	50.00	75.00	90.00	180.00
Harp.....	50.00	75.00	90.00	180.00
Organ.....	50.00	75.00	90.00	180.00
Clarinet.....	50.00	75.00	90.00	180.00
Practice Room (four hours per week).....	\$4.00			

### 1974 - 1975 TUITION SCHEDULE

#### RESIDENTS OF THE TYLER JUNIOR COLLEGE DISTRICT

Semester Hours	Tuition	Total
1	\$25.00	\$25.00
2	25.00	25.00
3	25.00	25.00
4	25.00	25.00
5	25.00	25.00
6	25.00	25.00
7	28.00	28.00
8	32.00	32.00
9	36.00	36.00
10	40.00	40.00
11	44.00	44.00
12	48.00	48.00
13	52.00	52.00
14	56.00	56.00
15	60.00	60.00
16	64.00	64.00
17	68.00	68.00
18	72.00	72.00
19	76.00	76.00

## OUT-OF-DISTRICT RESIDENTS OF TEXAS

Semester Hours	Tuition	Surcharge Fee Per Semester Hour - \$3.00	Total
1	\$25.00	\$ 3.00	\$28.00
2	25.00	6.00	31.00
2	25.00	9.00	34.00
4	25.00	12.00	37.00
5	25.00	15.00	40.00
6	25.00	18.00	43.00
7	28.00	21.00	49.00
8	32.00	24.00	56.00
9	36.00	27.00	63.00
10	40.00	30.00	70.00
11	44.00	33.00	77.00
12	48.00	36.00	84.00
13	52.00	39.00	91.00
14	56.00	42.00	98.00
15	60.00	45.00	105.00
16	64.00	48.00	112.00
17	68.00	51.00	119.00
18	72.00	54.00	126.00
19	76.00	57.00	133.00

## NON-RESIDENTS (OUT-OF-STATE)

Tuition	Surcharge Fee	Total
\$200.00	\$45.00	\$245.00

(Less than 15 semester hours - \$25.00 per semester hour)

**Refund Policy:**

No refund of tuition or fees will be made except to students who withdraw from the College during the first week of the regular semester.

Qualified applicants will be subject to a 20 per cent tuition charge.

To qualify for the refund, the applicant must have withdrawn by completing proper forms in the Registrar's Office.

No refund of tuition or fees is made to students who drop courses or who make changes after enrolling.



## Student Aids, Awards, Loans and Scholarships

**The Honor Graduate Scholarship.** The highest honor graduate of any affiliated high school is given a scholarship covering his tuition. This scholarship must be used within one year from the date of graduation.

**The A.A.U.W. Women's Graduate Scholarship.** The Tyler Branch of the American Association of University Women has established an annual scholarship of \$100 to be awarded to a woman graduate. The scholarship is awarded on the basis of scholarship, character, and need and is to be used for tuition and fees at the senior institution chosen by the student. The grantee is chosen by a scholarship committee of the A.A.U.W. from a list of three nominees by the college.

**Art Merit Award.** The Junior League of Tyler has established a \$100 annual award to be granted to the student showing the greatest achievement in the field of art.

**The Mildred Stringer Achievement Award.** A plaque inscribed with the recipient's name will be awarded as a part of the Honor's Day Program. The recipient will be chosen by the Apache Belles via written ballot. The Belle chosen is to be the girl who has achieved more in development, personal improvement, or one who has achieved more for the Apache Belle organization. This is an award from the Apache Belles to one of their own.

**Alpha Delta Kappa Scholarship.** The Tyler Teachers Honorary Sorority Alpha Delta Kappa has established an annual tuition scholarship for a student who plans to become a teacher. The scholarship is granted on the basis of ability and prospective success in the field.

**The Crusaders Scholarship.** The Crusaders Class of the Marvin United Methodist Church awards an annual scholarship in the amount of \$125 to a worthy student.

**Granberry Pre-Dental Scholarship.** Dr. James H. Granberry, an alumnus of Tyler Junior College, has established an annual scholarship covering tuition, fees, and books for a pre-dental student. The scholarship is granted at the end of the freshman year to such a student demonstrating high ability and need.

**The Coterie Club.** The Coterie Club, composed of musicians and music lovers, has established a scholarship which is awarded annually to a student who shows outstanding talent in music.

**Smith County Association for Retarded Children Special Education Major Scholarship.** Each year a \$100.00 scholarship is awarded to a student or students majoring in special education. The student(s) is selected on the basis of academic achievement by a committee from the organization.

**The Home Builders' Association Scholarship.** The Tyler Home Builders' Association annually awards a \$150.00 scholarship to a boy pursuing a career in a field related to the home building profession. The recipient is chosen by a committee within the organization from names submitted by the scholarship committee at Tyler Junior College.

**The American Business Women's Association Scholarship(s).** The American Business Women's Association of Tyler has created an annual \$100.00 scholarship(s) to be given to a young lady pursuing a career in the Secretarial Science Department or General Office Program at Tyler Junior College. The recipient is chosen by a committee within the organization from names submitted by the scholarship committee at Tyler Junior College. Financial need and academic achievement are prerequisites for application.

**The Florence and Marcus Strum Scholarships.** Mr. and Mrs. Marcus Strum of Tyler have established two tuition scholarships. The recipients must have reached sophomore standing and are selected on the basis of character, ability, and need.

**The Wilton Fair Endowment.** Mr. and Mrs. Wilton Fair have established an endowment which is used each year for scholarships and similar purposes.

This endowment consists of the revenue from certain valuable oil properties deeded to the college. Mr. Fair, a former member of the Board of Trustees of Tyler Junior College and one of its most active supporters, and Mrs. Fair established this fund in 1952.

**The Rotary Young Citizen Awards.** The Tyler Rotary Club in 1930 established the Rotary Young Citizen Awards recognizing the college designated leading young man and young woman. By secret ballot, the faculty chooses the recipients on the basis of meritorious conduct in the following categories:

Cleanliness	Thriftiness
Loyalty	Honesty
Dependability	Sportsmanship
Leadership	Courtesy
Service	Scholarship



**The Pirtle Scholarship in Science and Engineering.** Through the generosity of Mr. and Mrs. George Pirtle an annual scholarship of five hundred dollars is bestowed upon a graduating student majoring in engineering or a physical science.

**The Optimists' Club Scholarships.** The Breakfast Optimists' Club of Tyler has established an endowment fund from which the income is used for scholarships for a son or daughter of a member of the Tyler Police Department, the Tyler Fire Department, the Smith County Sheriff's Department or a member of those departments.

**Opti - Mrs. Club Scholarship.** The Opti - Mrs. Club, composed of the wives of the various Optimist Club members of Tyler, has established a \$120 tuition scholarship for a sophomore student based upon ability and need. The student chosen must be a resident of the Tyler Junior College District.

**The Mary Wallace Education Scholarship.** A \$120 annual scholarship for a second year student preparing for the teaching profession. The recipient must be of good character, pleasing personality, hold at least a B average in two semesters work and need scholarship aid.

**The Tyler Legal Secretaries Association Scholarship.** The Tyler Legal Secretaries Association has created an annual tuition scholarship for a woman resident of the Tyler Junior College District. The recipient must be in a Secretarial Training program. Preference is given to one who indicates a desire to become a Legal Secretary. Aptitude and need are considered.

**The En Avant Club.** The En Avant Club, a group of civic-minded young ladies, annually provides a scholarship to some young woman.

**The Doctor and Mrs. L. E. Skinner Scholarship.** Mr. and Mrs. W. Thomas Smith of Waco, Texas, have established an endowment, the income from which is annually awarded to a graduating high school senior who has established a good record and has financial need. The scholarship is in honor of the Tyler parents of Mrs. Smith.

**Lieutenant Ward van Orden Memorial Scholarship.** This is an annual scholarship of \$200.00 awarded to a freshman student on the basis of need coupled with proven college scholarship. It is made without consideration of race, color or creed in mem-

ory of Lt. van Orden, a graduate of Tyler Junior College who as a Navy Jet Fighter Pilot lost his life off North Viet Nam after 150 combat missions.

**The Bob Burns Scholarship.** An annual scholarship of \$200 to a graduating senior of John Tyler High School. It is established as a memorial to Robert L. Burns, for many years a Tyler Public Schools Principal. The scholarship is granted by a Committee of Counselors at John Tyler High School.

**John Tyler Parent-Teacher Association Scholarship.** A John Tyler graduate whose parent has been a member of the Parent-Teacher Association is eligible for the John Tyler Parent-Teacher Association Scholarship on the basis of ability and need.

The recipient is eligible to receive \$100 per year for the two-year Junior College period. Application may be made through the High School Counselor.

**The Jesse Pope Citizenship Scholarship.** The Tyler Civitan Club has established an annual tuition scholarship at Tyler Junior College in honor of the distinguished club leadership of Tyler Banker Jesse Pope. The scholarship is awarded to a graduating senior of John Tyler High School selected by the school's scholarship committee.

**The Optimist Club Oratorical Scholarship.** The Optimist Club of Tyler has established a \$100 scholarship in Tyler Junior College for the winner of the annual oratorical contest.

**The T. B. Butler Journalism Key.** The T. B. Butler Publishing Company of Tyler annually presents a gold key to the outstanding Journalism freshman of the college. The T. B. Butler Key carries a summer internship with the Tyler Courier-Times or the Tyler Morning-Telegraph.

**Journalism Ex-Students Award.** The Journalism Ex-Students Association annually awards a cash scholarship to an outstanding freshman majoring in Journalism.

**The E. Fred Herschbach German Language Award.** Because of his interest in the German language studies in Tyler Junior College Mr. E. Fred Herschbach, Sr. of Tyler established an endowment, the income from which annually provides a plaque and cash award to the outstanding second year student of German.



**The Watson W. Wise Incentive Award.** An endowment fund established by the Honorable Watson W. Wise, member of the Board of Trustees of the college, who has made many generous gifts to the college, provides an annual sum for a scholarship and beautiful trophy cup awarded to the student chosen by a faculty committee as the best exemplifying the virtues of industry, scholarship, and student activity.

**Tyler Lions Club Scholarships.** The Tyler Lions Club has established two annual scholarships of up to \$250 each for students in the Tyler High Schools and Tyler Junior College. The scholarships are restricted to students whose legal residence is in the City of Tyler and who combine qualities of good character and scholarship with need. The scholarships are designed to pay for tuition, fees, and books. Students will be recommended by the high school counsellors and designated by the Board of Directors of the Tyler Lions Club.

**The D.A.R. Scholarship.** The Mary Tyler Chapter of the Daughters of American Revolution awards a \$100 scholarship annually to an outstanding woman student who is completing her freshman year.

**The Juried Arts Scholarships.** Juried Arts, Incorporated annually presents one or more patron scholarships to students majoring in Art.

**The Sam R. Greer Biological Science Honor Award.** An endowment fund established by Mrs. Laura Ruggles-Gates of London, England, provides the funds for a \$250 annual biological science award in memory of her first husband, Mr. Sam R. Greer, a nationally prominent Tyler banker. The recipient must have performed with distinction in his freshman and sophomore years in a program leading to a baccalaureate degree in the biological science or towards admission to a College of Medicine.

Special consideration will be given to those indicating an interest in graduate study in Human Biology or Genetics. All candidates must show promise of scholarly success, and the recipient will be required to submit an annual report of his progress in upper division studies.

Full particulars may be obtained from the Chairman of the Natural Science Department of Tyler Junior College.

**The Century Scholarship.** The Century Class of ladies of the Marvin United Methodist Church awards \$120 annually to a local girl on the basis of character, ability and need.

**The Averille Greenhaw Home Economics Scholarship.** An annual scholarship for a second year student majoring in Home Economics. The recipient is selected on the basis of character, ability, and need.

**Sales and Marketing Executive Scholarship.** The Tyler Sales and Marketing Executive Club has established one or more scholarships for talented, deserving students entering college who intend to pursue a career in sales and marketing. These are awarded through the College Scholarship Committee.

**Smith County Bar Association Scholarship.** The Smith County Bar Association has established an annual scholarship of \$150 which is granted to a student completing his freshman year and planning to major in History, Government or Economics or to one registered in a pre-law program of any kind.

The award is deposited with Tyler Junior College for the student's expenses in his second year. Outstanding scholarship and participation in extra-curricular activities are the basic qualifications upon which the choice is made. Need of the student is a secondary qualification.

**The Texas Opportunity Plan Loans.** Students who are residents of Texas may, if qualified, receive loans to cover expenses while attending Tyler Junior College provided by the Texas Opportunity Loan Fund of the State of Texas.

Mr. Raymond Fortner is the financial aids officer and applications should be made directly to him.

**The Tyler City Council of Parents and Teachers Scholarship.** The Tyler City Council of Parents and Teachers has established an annual scholarship not to exceed \$200 or as much of that amount as is required for tuition, books, fees, etc.

The scholarship is granted to an outstanding and deserving boy or girl graduate of Robert E. Lee or John Tyler High School. Application for the scholarship may be made to the Counselor of the high schools, any member of the Scholarship Committee, or any of the Local Unit Presidents.

**The R. W. Fair Foundation Music Scholarships.** The R. W. Fair Foundation annually provides several music scholarships to students of superior talent.

**Women's Symphony League Scholarship.** The Tyler Women's Symphony League annually grants a \$150 scholarship to an outstanding music student.



**Symphonettes Music Scholarship.** The Symphonettes, sponsored by the Women's Symphony League, annually awards a scholarship to an outstanding music student.

**John Ben Shepperd Scholarship.** The Texas Law Enforcement Foundation created the John Ben Shepperd Scholarship Fund to provide college educations for children of Texas law enforcement officials killed in performance of duty.

The fund makes college scholarships available for children of law enforcement officers on any level of jurisdiction killed in the performance of duty. The amount of a grant depends on the need of the student.

A Scholarship Committee composed of members of the board of directors of the Texas Law Enforcement Foundation will consider the following points in screening qualified scholarship applicants:

- (1) Aptitude for college work,
- (2) Desire for college training,
- (3) Financial need.

**Rehabilitation Assistance.** The Texas Rehabilitation Commission offers assistance for tuition and required fees to students who have certain physical or mental handicaps, provided the vocational objective selected by the handicapped person has been approved by an appropriate representative of the Commission. Through this State Agency, rehabilitation services are available to assist handicapped persons to become skilled for employment. An example of some of these disabilities are: diabetes, heart impairment, polio, curvature of the spine and many others.

Application for this type of assistance should be made to the nearest Rehabilitation office. Inquiries may be addressed to: Texas Rehabilitation Commission, 305 South Broadway, Room 604, Tyler, Texas 75701, Telephone 597-1191.

**Texas Law Enforcement Foundation Scholarships.** The Texas Law Enforcement Foundation makes available scholarships for sons and daughters of deceased law enforcement officials. Application blanks for this or the John Ben Shepperd Scholarship may be obtained from the Foundation Office, 3914 Seminole, Houston 27, Texas.

**Veterans' G.I. Bill of Rights.** Veterans with military service since 1955 are eligible for federal payments and benefits while attending Tyler Junior College.

Mr. Charles Hayden is the Veteran's Counselor. Veterans may see him or phone him for information and assistance in applying for these benefits.

**Veteran Dependency Scholarships.** The Federal Government has set up provisions in Public Law 634 whereby certain veteran dependents may be eligible for a subsidy while pursuing their education. Orphans of service personnel and dependents of veterans with service connected disability may find themselves eligible.

**The Mrs. Gary Bennie Henson Loan Fund.** This loan fund was established in 1970 in memory of Mrs. Gary Bennie Henson, a member of a prominent philanthropic Tyler family. The student begins repayment when his earnings begin.

**The Realtors Board Scholarship.** The Tyler Board of Realtors, on the basis of ability and need, awards two annual scholarships of \$200.00 each to local students.

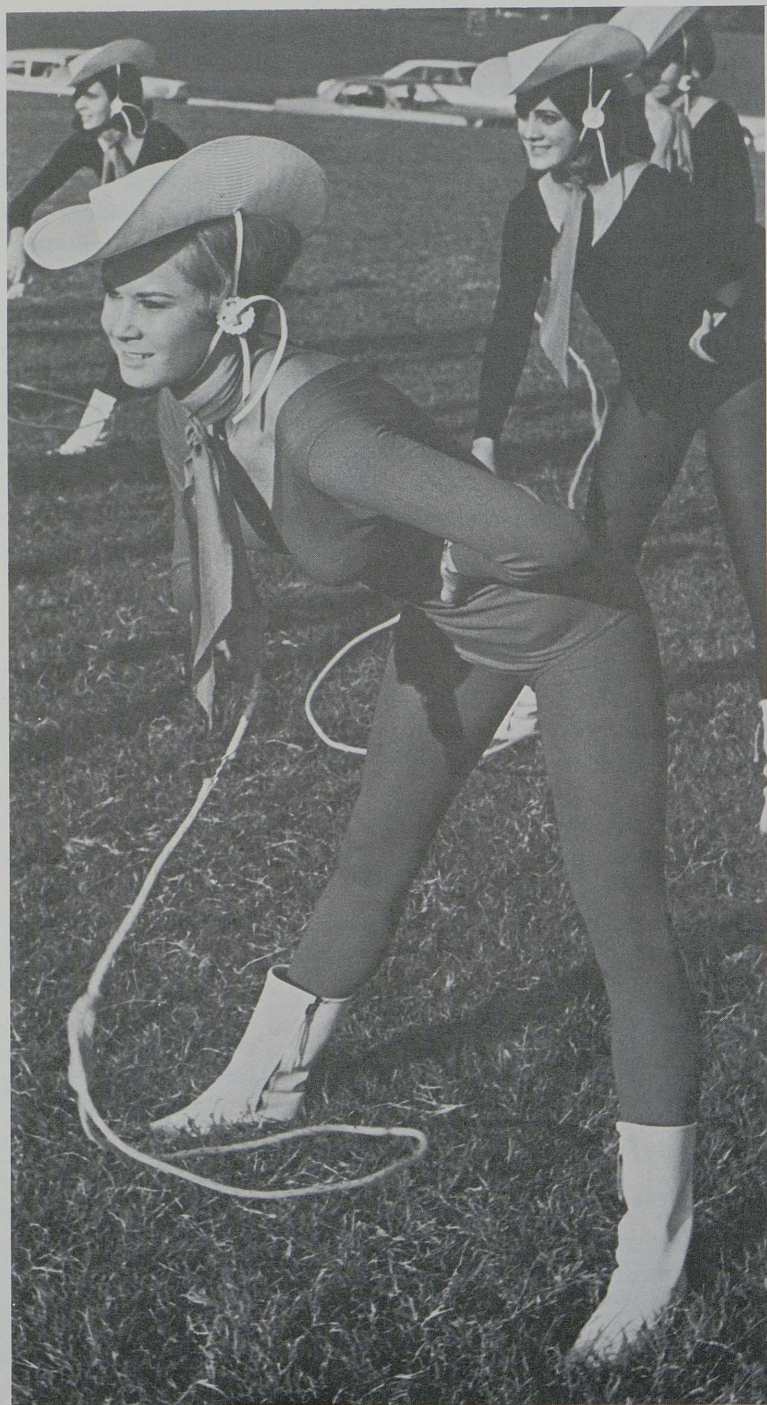
**The Pilot Club Scholarship.** A \$120.00 scholarship is awarded annually to a Tyler Junior College student by The Pilot Club of Tyler. The recipient is chosen by an educational committee from the organization, and the scholarship is awarded on the basis of academic ability and financial need.

**Tyler Chapter, National Secretaries' Association Scholarship.** This \$120 scholarship is awarded annually to a young lady enrolled in the Secretarial Science Department at Tyler Junior College. The scholarship committee within the association chooses the recipient on the basis of financial need and academic achievement.

**The Tyler Jaycee-ettes Scholarship.** A scholarship of \$150 is presented annually to a student from the Tyler Jaycee-ettes. The organization has a scholarship committee which chooses the recipient.

**The Apache Belle Alumni Scholarship.** The Apache Belle Alumni Association has established a \$120 scholarship to be granted to an Apache Belle member. The organization, in cooperation with the Apache Belle sponsor chooses the recipient.





APACHE BELLES



## Student Activities

The Director of Student Activities is an administrative officer who is general sponsor and coordinator of all student organizations. As such she keeps the records, constitutions and by-laws of student organizations and maintains a social calendar. All college organization-sponsored social affairs must first have the approval of the Director in order to clear the date on the social calendar.

The Tyler Junior College provides various types of student activities which furnish training in leadership, afford opportunities for recreation, and serve as a means of student development. Among these activities are the following:

**The Apache Band.** The internationally famous Apache Band is the official college band which is open to all qualified students, and also accompanies the Apache Belles.

**The Stage Band.** A select group of band students from the Apache Band chosen to play all forms of modern jazz.

**The Concert Band.** A select group of band students out of the Apache Band which performs many varieties of music for concerts.

**The Apache Belles.** The internationally famous Apache Belles is a women's organization which presents skilled group performances and routines, appears on national television for half-time entertainment for both college and professional football games, and entertains on other occasions.

Throughout the years special study is given to good taste in clothing, make-up, manners and general personal improvement.

**Tyler Junior College Publications.** The weekly official college newspaper, Tyler Junior College News, is prepared and managed by a student staff under the direction of faculty sponsors. Students act as reporters, editors, and business managers of this publication. The paper is furnished free to students.

For thirty-two consecutive semesters the Tyler Junior College News has won the highest award given by the Associated Collegiate Press. This award, The All American Honor Rating, is given annually in recognition of merit to a limited number of colleges and universities.

The Apache is the college yearbook. It is a publication edited and published by a student staff.



**The Apache Guard Association.** A service organization of college men dedicated to the development of college spirit and good sportsmanship. The Association sponsors worthwhile projects.

**Athletics.** The college schedules intercollegiate competition in football, basketball, baseball, tennis, and golf. For non-varsity students an extensive schedule of intramural sports and the physical education program affords all students many opportunities for participation.

**The Singing Apaches.** The Singing Apaches is a choral society open to capable students interested in vocal music.

**The Harmony and Understanding Group.** A group out of The Singing Apaches, specializing in "Pop Music".

**The Electronics Club.** This club is composed of students who are pursuing an Electronics profession or engagement in other related fields of study. The Club also invites as members students attending Tyler Junior College who are radio amateurs. The purpose of the club is to acquaint the student with the practical aspects of the field of Electronics, and to further individual knowledge and develop interest in professional growth.

**The Drafting Club.** This club welcomes any student enrolled in the Drafting or Engineering Graphics classes. The purpose is to acquaint the student with the practical aspects of drafting as a professional; to further individual knowledge and interest toward professional growth. Guest speakers are brought in to speak at meetings, and field trips are arranged to see the practical application of drafting. Scholarships are sometimes awarded through the organization.

**Epsilon Delta Pi (E. D. P.) — The Computer Club.** This club is composed of those students interested in Data Processing, key punch operating, and other forms of Computer Science.

**The Dental Hygiene Club.** An organization of those students who wish to become Dental Hygienists or possess a knowledge of related fields.

**Texas Eastern School of Nursing Student Organization.** This is an organization of students dedicated to those interested in nursing as a profession.

**Respiratory Therapy.** Membership in this organization is open to Tyler Junior College students enrolled in Respiratory Therapy. These students do a part of their work at The East Texas Chest Hospital.

**Lambda Phi Nu.** The purpose of the Lambda Phi Nu Club shall be to further the skills and interests of Tyler Junior College in the field of nursing. It shall also be the purpose of Lambda Phi Nu Club to further the interests and advance the knowledge of people of this and surrounding areas by performance of leadership and skills of the highest calibre. Any student interested in Licensed Vocational Nursing and participating in the required curriculum is eligible for membership. This is an organization of the TJC Health Career Training Program.

**Recreation Leadership.** The purpose of the Recreation Leadership Club shall be to further the skills and interests of Tyler Junior College students in the fields of Recreation Leadership by continuous and active participation in all such areas. Any participating student of the Recreation Leadership curriculum is eligible for membership. This is an organization of the TJC Health Career Training Program.

**The Future Secretaries Association.** This is a Junior Branch of National Secretaries Association sponsored by N.S.A. and works closely with members of this professional organization. The local organization consists of students preparing to enter business vocations such as the secretarial and clerical. It provides helpful guidance and pleasant social activities to the members of the club.

**Lex Plaetoria.** This is a pre-law student society. The members of this society receive guidance and encouragement from the Smith County Bar Association.

**Old Heidelberg Club.** This organization, sponsored by the German Department, invites those interested in the study of the language, culture, and traditions of the German people.

**Las Mascaras Dramatic and Forensic Club.** Las Mascaras fosters an interest in all phases of forensic and dramatic art. Any student in Tyler Junior College who is interested in them is eligible for membership. Las Mascaras sponsors major dramatic productions and forensic competitions each year.

**Phi Theta Kappa.** The Alpha Omicron Chapter of Phi Theta Kappa, the national Junior College scholastic fraternity, is composed of members selected on the basis of scholarship, character, leadership and service. Its membership is restricted to ten percent of the students enrolled in the Tyler Junior College, and the faculty and local chapter name as members those students meriting special honor.



**The Student Senate.** The Student Senate is the official organization for student government under the sponsorship of the Student Senate assisted by the Dean of Student Life and the Director of Student Activities. Parties, dances, feature movies, various popular singers and musical organizations, dramatic organizations such as Shakespearian Theater are offered to the student body and faculty.

**Law Enforcement Student Association.** The Law Enforcement Student Association has as its express purpose promoting, teaching, and learning of and about the field of Law Enforcement. The members propose to work toward a better understanding of the problems and methods used to handle these problems by the Law Enforcement organization. Members of this organization, LESA, must be TJC students who are Law Enforcement majors or in a related field.

**The Averille Greenhaw Home Economics Club.** This club's membership is composed of those students, both male and female, interested in any phase of home economics.

**The Apache Rodeo Club.** This club promotes the interests of Tyler Junior College students in rodeo and other related activities.

**Chi Gamma Iota.** This is an organization of ex-servicemen known as XGI's and the membership is open to any Tyler Junior College student who meets that qualification and is interested in service to his fellowman.

**Chi Alpha.** This organization promotes the spiritual and social life of the young people of Tyler Junior College by providing those opportunities for worship, fellowship, training, and evangelism which will accomplish those ends. Chi Alpha was founded by students belonging to the Assembly of God, but it is a non-denominational organization open to any interested student.

**Sororities.** Tau Beta Sigma is an organization of the Progressive Band Women of the Tyler Junior College Apache Band, operating in the field of junior college and university bands for the purpose of promoting existence and welfare of collegiate bands and creating a wholesome respect for their activities and achievements. All members are female and in good standing with the TJC Apache Band. This organization is affiliated with the national organization.

Sans Souci Sorority shall have as its purpose to establish a

sisterhood that shall have for its four-fold object the physical, intellectual, social, and spiritual development of its members. The membership is open to any woman student at Tyler Junior College who has a "C" or better academic average and who receives an invitation and a bid to become a member.

Tau Kappa sorority members pledge themselves to strive for the following goals: sisterhood, service, pride, friendship, love. The membership is open to any woman student at Tyler Junior College who has a "C" or better academic average and who receives an invitation and a bid to become a member.

Phi Beta Epsilon sorority members have as their motto: "Came as friends, found sisters." This organization acts as a service organization as well as a social one. The membership is open to any woman student at Tyler Junior College who has a "C" or better academic average and who receives an invitation and a bid to become a member.

Zeta Phi Omega sorority has as its object the advancement of social service and encouragement of highest scholastic standards and character among its members. Any woman student of Tyler Junior College who receives an invitation and a bid to become a member of this organization must have a "C" or better scholastic average.

Alpha Delta Sigma is Tyler Junior College's newest sorority. The object of this organization is the advancement of social service and encouragement of highest scholastic standards and character among its members. This organization may include as members any female student of Tyler Junior College who maintains a "C" academic average and who is given an invitation and a bid to become a member.

**Fraternities.** Alpha Tau Omega is one of the national fraternities on a Junior College campus. The members of the organization wish to promote unity and understanding between their fellow men, and to be of some campus and civic service. The membership in this organization is open to any male student at Tyler Junior College who receives an invitation and a bid to become a member.

Delta Upsilon Fraternity of Tyler Junior College is the first national fraternity in the United States to be approved for a junior college. When the National Interfraternity Conference approved national fraternities for junior colleges, Delta Upsilon became a colony in December, 1971, and a national fraternity



the following February. The purposes of the organization are to promote fraternal brotherhood and to be a service to the City of Tyler and the world. Membership is by invitation only.

Sigma Phi Epsilon is a national fraternity on Tyler Junior College campus. Its purpose is to promote and establish better relations within the college and the democratic principles desired. Membership is by invitation only.

Pi Kappa Alpha is a colony on Tyler Junior College campus. Upon receiving its charter, the colony will then receive its chapter name of the Pi Kappa Alpha Fraternity. The objective of this chapter is to promote the welfare and development of its members and the Pi Kappa Alpha Fraternity. The membership is by invitation only.

The Alpha Tau Alpha Fraternity has as its purposes to promote unity, harmony, understanding, and advancement of justice and service to all men. A member must have received and accepted a duly offered invitation to join this chapter. Each member must be a male student who maintains a "C" average, is interested in the advancement of social service, and wishes to encourage the highest scholastic standards and character among its members.

Kappa Kappa Psi is a fraternity whose members are currently enrolled in the Apache Band for credit or audit and in good standing. Each member must maintain a "C" average. A member is admitted to this fraternity through pledgeship. This organization is affiliated with the National Band Fraternity.

**Religious Student Centers.** Tyler Junior College has four religious student centers. The Church of Christ Bible Chair is known as Tri-C. The Baptist Student Union is known as B.S.U. The Methodist Student Union is known as the Wesley Foundation. The Presbyterian Bible Chair members meet in the facilities of the Fifth Street Presbyterian Church adjacent to the campus. Each of the other bible chairs has its own activities building. Each Bible Center promotes the teaching of accredited Bible courses, worship, fellowship, fun and entertainment for any Tyler Junior College student.

**Community Concerts.** The Tyler Community Concerts organization extends to any regular Tyler Junior College student the privilege of free admission to its concerts at Wise Auditorium on presentation of valid Tyler Junior College Identity Card.

**Circle K.** This is a group of young men sponsored by the Kiwanis Clubs of Tyler. It is a service organization.

**The Hudnall Planetarium.** This well-known planetarium offers scheduled programs for the general public and daily programs by reservation for school groups. There is no admission charge for students or faculty who present a Tyler Junior College Identity Card.

**Athletic Program.** The Tyler Junior College inter-collegiate athletic program has become internationally known because of the excellence of its football and basketball teams. Each year these teams are numbered among the top of the nation. Few are the colleges whose names inspire as much respect and admiration as does the name "Apaches."

Much of the credit for achieving national standing year in and year out goes to the spirit of the student body in its "twelfth-man" backing of the teams.





## SUGGESTED COURSES OF STUDY FOR FRESHMEN

**Planning a Program in Tyler Junior College.** It is important that the beginning college student determines his objective at the time of enrollment and then plans his program to carry him directly to its achievement.

Tyler Junior College, with its Counseling Staff and broad course offerings, assists in planning each student's program to meet his needs.

Transfer students are given course plans designed to meet the special requirements of the degree choice at the chosen Senior College or University. Terminal program students are given courses which prepare them for the career of their choice.

### GENERAL PLANS

The following plans are a few of the most popular fields.\* Their listing does not indicate that others cannot be taken. College officials will work out degree programs in any desired field.

Since college plans differ, the student should check his course by the catalogue of the college to which he intends to transfer or request the Registrar or Counselor to assist him in doing so.

All first year students take Physical Education unless excused by a doctor's statement.

**Agriculture.** (Texas A. & M. Plan. Special course plans for other institutions will be arranged.)

SUBJECT	CREDIT
English .....	6 semester hours
Mathematics .....	6 semester hours
Biology .....	8 semester hours
Agriculture .....	6 semester hours
United States History .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

\* Special Technological Programs are found on Pages 161-196.



**Bachelor of Arts or Bachelor of Science Degree.**

English .....	6 semester hours
Mathematics .....	6 semester hours
United States History .....	6 semester hours
Natural Science .....	6 or 8 semester hours
Foreign Language .....	8 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Bachelor of Business Administration. (General Plan)**

Mathematics .....	6 semester hours
English .....	6 semester hours
Natural Science .....	6 or 8 semester hours
Speech .....	3 semester hours
United States History .....	6 semester hours
Typewriting (non-credit) .....	0 semester hours
Elective .....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Pre-Dentistry.**

English .....	6 semester hours
Chemistry .....	8 semester hours
Biology .....	8 semester hours
United States History .....	6 semester hours
Elective (Mathematics recommended) .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Elementary Education Major.**

English .....	6 semester hours
Mathematics or Foreign Language .....	6 or 8 semester hours
United States History .....	6 semester hours
Geology or General Biology .....	8 semester hours
Music or Art .....	6 or 8 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Secondary Education Major.** The plan is the same as the above except music or art is not required unless the student plans to major in one of these fields. Others should substitute subjects in the chosen major fields for music or art.

**Engineering.** See complete optional plans, Pages

**Forestry.**

English .....	6 semester hours
Algebra .....	3 semester hours
Biology .....	8 semester hours
Trigonometry .....	3 semester hours
Engineering Drawing .....	3 semester hours
Descriptive Geometry .....	3 semester hours
United States History .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Geology.**

English .....	6 semester hours
Chemistry .....	8 semester hours
Trigonometry .....	3 semester hours
Algebra .....	3 semester hours
United States History .....	6 semester hours
Geology .....	8 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Home Economics.**

English .....	6 semester hours
Chemistry or Biology .....	6 or 8 semester hours
Home Economics .....	6 or 9 semester hours
Electives .....	6 semester hours
United States History .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Journalism.**

English .....	6 semester hours
Natural Science .....	8 semester hours
Foreign Language or Elective .....	6 or 8 semester hours
Journalism .....	6 semester hours
United States History .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Mathematics.** See mathematics section, Pages 116-118.



**Music.**

Music 113T, 123T .....	6 semester hours
Music 111T, 121T .....	2 semester hours
Music 113L, 123L .....	6 semester hours
Applied Music, Major Performance.....	4 semester hours
Applied Music, Minor Performance.....	4 semester hours
Musical Organizations .....	2 semester hours
English 113, 123 .....	6 semester hours
United States History or Electives.....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Optometry.**

English .....	6 semester hours
Physics .....	8 semester hours
Chemistry .....	8 semester hours
Biology .....	8 semester hours
Mathematics .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Pharmacy.**

English .....	6 semester hours
Biology .....	8 semester hours
Physics .....	8 semester hours
Chemistry .....	8 semester hours
United States History.....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Physics.** See physics section, Pages**Pre-Law.**

United States History .....	6 semester hours
English .....	6 semester hours
Natural Science .....	8 semester hours
Mathematics .....	6 semester hours
Public Speaking .....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

Typewriting (non-credit, if taking the  
Business Administration Plan) ..... 0 semester hours

**Pre-Medicine. (Associate Degree Plan)**

English .....	6 semester hours
Chemistry .....	8 semester hours
Mathematics .....	6 semester hours
Foreign Language .....	8 semester hours
United States History.....	6 semester hours
Biology .....	8 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**Pre-Nursing Baccalaureate Degree Plan — Freshman Year.**

English .....	6 semester hours
United States History .....	6 semester hours
Biology .....	8 semester hours
Psychology .....	3 semester hours
Chemistry .....	6 semester hours
Sociology .....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

**PROFESSIONAL NURSING (RN) \***

The Tyler Junior College, Medical Center Hospital, and Mother Frances Hospital cooperatively operate the Texas Eastern School of Nursing as a separate, non-profit corporation.

Students desiring to enroll in the three-year diploma program should make application directly to the Director of Recruitment at 801 Clinic Drive, Tyler, Texas. Those accepted by the Nursing School receive their first two years of instruction through Tyler Junior College with liberal arts and science courses taught on the college campus. Nursing classes throughout the entire three year program are taught at TESN.

The School of Nursing is fully accredited by the National League for Nursing and the Board of Nurse Examiners for the State of Texas. Graduates are eligible to take the examination for certification as Registered Professional Nurses (RN).

Students satisfactorily meeting the requirements set by Tyler Junior College receive an Associate-in-Science Degree, generally at the completion of the second academic year. Students satisfactorily completing all three years are awarded a diploma by TESN.

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\* For description of the Licensed Vocational Nursing (LVN) curriculum, see pages 165-166.



The following is the curriculum in Nursing as offered by Tyler Junior College: \*\*

**Professional Nursing (RN).**

**First Year — First Semester.**

English 113 .....	3 semester hours
Biology 113B .....	3 semester hours
Biology 114A .....	4 semester hours
Chemistry 113N .....	3 semester hours
Psychology 213 .....	3 semester hours
Nursing 112 .....	2 semester hours

**First Year — Second Semester.**

English 123 .....	3 semester hours
Biology 123B .....	3 semester hours
Chemistry 123N .....	3 semester hours
H. E. 123C .....	3 semester hours
Nursing 133 .....	3 semester hours
Nursing 143 .....	3 semester hours

**First Year — Summer (6 weeks term)**

History 213 .....	3 semester hours
Government 213 .....	3 semester hours

**Second Year — First Semester.**

Nursing 216A .....	6 semester hours
Nursing 216B .....	6 semester hours
History 223 .....	3 semester hours
Sociology 213 .....	3 semester hours

**Second Year — Second Semester.**

Nursing 216C .....	6 semester hours
Nursing 226 .....	6 semester hours
Psychology 223A .....	3 semester hours
Government 223 .....	3 semester hours

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\*\* For course descriptions in the third year see the Texas Eastern School of Nursing Bulletin.

## ONE YEAR BUSINESS AND COMMERCIAL COURSES

For business students interested in an intensive business course, the Certificate of Proficiency is awarded either in secretarial administration or general business, upon completion of 30 semester hours of work. These courses are planned to train the student for work in an office. All courses listed under the suggested plan are required.

### Secretarial Course

Shorthand* BA 113S and BA 111S —	
BA 123S and BA 121S —	
BA 213S and BA 211S —	
BA 223S and BA 221S .....	8 semester hours
Typewriting BA 113T (Beginning)	
or BA 123T - BA 213T.....	6 semester hours
Secretarial Practice BA 113F - BA 123F.....	6 semester hours
Office Machines BA 113M.....	3 semester hours
Business English BA 113R	
(first semester) .....	3 semester hours
Business Correspondence BA 113C **	
(second semester) .....	3 semester hours
Accounting BA 113A or BA 214.....	3 or 4 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

### General Business Course

Typewriting BA 113T (Beginning)	
or BA 123T - BA 213T.....	6 semester hours
Accounting BA 113A or BA 214.....	3 or 4 semester hours
Office Practice BA 113G .....	3 semester hours
Keypunch EDP 111 .....	1 semester hour
Business Math BA 113D .....	3 semester hours
Office Machines BA 113M .....	3 semester hours
Business English BA 113R	
(first semester) .....	3 semester hours
Business Correspondence BA 113C **	
(second semester) .....	3 semester hours
Secretarial Practice BA 113F - BA 123F.....	6 semester hours
Psychology 111 .....	1 semester hour
Physical Training .....	2 semester hours

\* Students will be placed in typing and shorthand at determined proficiency levels on the basis of high school courses and/or proficiency tests.

\*\* Prerequisite Business English BA 113R



## SUGGESTED ASSOCIATE IN BUSINESS ADMINISTRATION DEGREE PLANS.

### GENERAL SECRETARIAL PROGRAM

#### First Year — First Semester

Business English BA 113R.....	3 semester hours
Shorthand BA 113S - 111S *	4 semester hours
Typewriting BA 113T *	3 semester hours
Secretarial Practice BA 113F.....	3 semester hours
Introduction to Business BA 113B.....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Education .....	1 semester hour

#### First Year — Second Semester

English 113 .....	3 semester hours
Shorthand BA 123S - 121S .....	4 semester hours
Typewriting BA 123T.....	3 semester hours
Secretarial Practice BA 123F.....	3 semester hours
Business Mathematics BA 113D.....	3 semester hours
Physical Education .....	1 semester hour

#### Second Year — First Semester

Office Practice BA 113G.....	3 semester hours
Typewriting BA 213 or Speech 223A*** .....	3 semester hours
Office Machines BA 113M.....	3 semester hours
Shorthand BA 213S - 211S .....	4 semester hours
Accounting BA 113A or BA 214**.....	3 or 4 semester hours

#### Second Year — Second Semester

Government 223 .....	3 semester hours
Accounting BA 123A or BA 224**.....	3 or 4 semester hours
Business Correspondence BA 113C **** .....	3 semester hours
Shorthand BA 223S - 221S or Executive Secretaryship BA 223F.....	3 or 4 semester hours
Office Practice BA 123G .....	3 semester hours
Keypunch EDP 111 .....	1 semester hour

\* Students will be placed in typing and shorthand at determined proficiency levels and professional electives substituted where warranted.

\*\* Students whose objective is a baccalaureate degree are required to take Accounting BA 214-224.

\*\*\* Speech is to be taken by students who have completed typewriting requirements.

\*\*\*\* Prerequisite Business English BA 113R

**GENERAL OFFICE PROGRAM****First Year — First Semester**

English 113 .....	3 semester hours
Typewriting BA 113T * (Beginning).....	3 semester hours
Secretarial Practice BA 113F.....	3 semester hours
Introduction to Business BA 113B.....	3 semester hours
Office Machines BA 113M.....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Education .....	1 semester hour

**First Year — Second Semester**

English 123 .....	3 semester hours
Typewriting BA 123T .....	3 semester hours
Secretarial Practice BA 123F.....	3 semester hours
Speech 223A .....	3 semester hours
Business Correspondence BA 113C **.....	3 semester hours
Physical Education .....	1 semester hour

**Second Year — First Semester**

Government 213 .....	3 semester hours
Economics 213 .....	3 semester hours
Typewriting BA 213T or Business Law BA 213L ***.....	3 semester hours
Accounting BA 113A or BA 214 ****.....	3 or 4 semester hours
Psychology 213 .....	3 semester hours

**Second Year — Second Semester**

Government 223 .....	3 semester hours
Economics 223 .....	3 semester hours
Elective .....	3 semester hours
Accounting BA 123A or BA 224 ****.....	3 or 4 semester hours
Personal Finance BA 113E.....	3 semester hours

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\* Students will be placed in typing and shorthand at determined proficiency levels and professional electives substituted where warranted.

\*\* Prerequisite English 113.

\*\*\* BA 213L is to be taken by students who have completed typewriting requirements.

\*\*\*\* Students desiring a baccalaureate degree must take BA 214 and BA 224.



### LEGAL SECRETARIAL PROGRAM

#### First Year — First Semester

English 113 .....	3 semester hours
Typewriting BA 113T* .....	3 semester hours
Shorthand BA 114S* .....	4 semester hours
History 213 .....	3 semester hours
Secretarial Practice BA 113F .....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Education .....	1 semester hour

#### First Year — Second Semester

English 123 .....	3 semester hours
Typewriting BA 123T .....	3 semester hours
Shorthand BA 124S .....	4 semester hours
Secretarial Practice BA 123F .....	3 semester hours
History 223 .....	3 semester hours
Physical Education .....	1 semester hour

#### Second Year — First Semester

Government 213 .....	3 semester hours
Office Machines BA 113M .....	3 semester hours
Shorthand BA 214S .....	4 semester hours
Typewriting BA 213T .....	3 semester hours
Accounting BA 113A or BA 214 .....	3 or 4 semester hours

#### Second Year — Second Semester

Secretarial Procedures (Legal) BA 223L .....	3 semester hours
Executive Secretaryship BA 223F .....	3 semester hours
Shorthand BA 224S (Legal Secretary Option) .....	4 semester hours
Business Law BA 213L .....	3 semester hours
Business Correspondence BA 113C** .....	3 semester hours

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\* Students will be placed in typing and shorthand at determined proficiency levels and professional electives substituted where warranted.

\*\* Prerequisite English 113.

**MEDICAL SECRETARIAL PROGRAM****First Year — First Semester**

Shorthand BA 114S *	4 semester hours
Typewriting BA 113T *	3 semester hours
History 213	3 semester hours
Secretarial Practice BA 113F	3 semester hours
Psychology 111	1 semester hour
English 113	3 semester hours
Physical Education	1 semester hour

**First Year — Second Semester**

English 123	3 semester hours
Typewriting BA 123T	3 semester hours
Shorthand BA 124S	4 semester hours
History 223	3 semester hours
Secretarial Practice BA 123F	3 semester hours
Physical Education	1 semester hour

**Second Year — First Semester**

Government 213	3 semester hours
Accounting BA 113A or 214	3 or 4 semester hours
Typewriting BA 213T	3 semester hours
Shorthand BA 214S	4 semester hours
Biology 114	4 semester hours

**Second Year — Second Semester**

Secretarial Procedures (Medical) BA 223M	3 semester hours
Business Correspondence BA 113C **	3 semester hours
Office Machines BA 113M	3 semester hours
Biology 124 or Biology 114A or BA 223F	3 or 4 semester hours
Shorthand BA 224S (Medical Secretary Option)	3 semester hours

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\* Students will be placed in typing and shorthand at determined proficiency levels and professional electives substituted where warranted.

\*\* Prerequisite English 113.



**SUGGESTED ASSOCIATE IN ARTS DEGREE****(Business Education Major)****First Year — First Semester**

English 113 .....	3 semester hours
History 213 .....	3 semester hours
Biology 114 or Geology 114 .....	4 semester hours
Typewriting BA 123T .....	3 semester hours
Introduction to Business .....	3 semester hours
Psychology 111 .....	1 semester hour
Physical Education .....	1 semester hour

**First Year — Second Semester**

English 123 .....	3 semester hours
History 223 .....	3 semester hours
Biology 124 or Geology 124 .....	4 semester hours
Mathematics 113 * .....	3 semester hours
Shorthand 123S - 121S .....	4 semester hours
Physical Education .....	1 semester hour

**Second Year — First Semester**

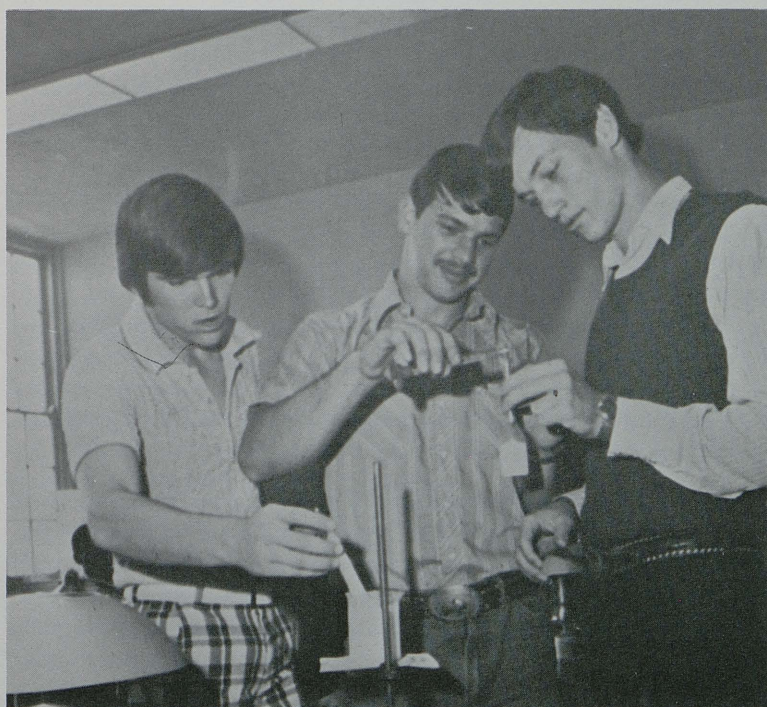
English 213 .....	3 semester hours
Government 213 .....	3 semester hours
Economics 213 .....	3 semester hours
Principles of Accounting BA 214 .....	4 semester hours
Mathematics 113K * .....	3 semester hours

**Second Year — Second Semester**

English 223 .....	3 semester hours
Government 223 .....	3 semester hours
Economics 223 .....	3 semester hours
Principles of Accounting BA 224 .....	4 semester hours
Mathematics 123K * .....	3 semester hours

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\* See the catalog of the senior college to which you will transfer.





## DESCRIPTION OF COURSES

For a description of the system of numbering of courses, see page 28 of this catalogue.

### Agriculture

Agriculture Courses with the Asterisk are offered in 1975-76.

**Agriculture 113 — General Animal Husbandry (2-2)** An introductory survey course intended to acquaint the student with the importance of livestock and livestock farming. General factors influencing efficiency in feeding, market value, breeding, health and adaptability of various species to geographical and climatic regions are studied. The course is designed to develop in the student an appreciation of improved livestock. Selecting and judging the various breeds and market classes are stressed in laboratory.

**Agriculture 114A — General Entomology (3-2)** The systematic study of the principal orders of insects; the relation of the anatomy of the insect to control measures; the life histories of the more common insects; methods of control for injurious forms.

**\*Agriculture 113B — Dairying (2-2)** Dairying in its relation to agriculture and community development; branches of dairy industry and conditions affecting their development; the place of dairying on the farm; composition and food value of milk and its products; the production and handling of clean milk on the farm.

**\*Agriculture 113C — Poultry Production (2-2)** The breeds and types of poultry, culling, poultry for egg production, incubation, brooding and feeding for growth and egg production, winter and summer management, housing and hygiene, preparing poultry for market, methods of marketing; practical application of these subjects to general farm conditions. The practice consists of the identification of breeds and varieties, judging, poultry for egg production, plans for poultry farms and poultry houses, identification of feeds.

**\*Agriculture 113E — Introduction to Agricultural Economics (3-0)** Characteristics of our economic system and basic economic principles. Organization and management of the farm and ranch firm; structure and operation of the agricultural marketing system; functional and institutional aspects of agricultural finance; the farm problem, its causes, consequences and suggested solutions.

**Agriculture 113F — Farm Management (3-0)** The art and business of managing a farm, including the study of choosing suitable major and minor enterprises that will provide a profitable business; such as selecting a farm, using proper kinds and amount of labor and capital, simple and accurate cultural organizations, agriculture experiment and extension service.

**Agriculture 113G — Landscaping (3-0)** This course will acquaint the student with trees, shrubs, grasses perennials, and annuals suitable for landscaping the home grounds, churches, schools, and parks. Biological classification, plant characteristics, best combinations, propagation methods, digging, bagging, transplanting, pruning, and care will be studied.

**Agriculture 123 — Fundamentals of Crop Production (2-2)** Classification and distribution of farm crops; importance of good varieties and good seed; crop improvement; preparation of the seed bed, commercial fertilizers, manures and lime; seeding practices; crop tillage; harvesting; meadow and pasture management; weeds; crop rotation; diseases and insect enemies.

**Agriculture 123D — Wildlife Management (3-0)** A course designed to acquaint the student with the wildlife resources of the United States with special reference to Texas. Emphasis is placed on the inter-relationship of plants and animals in our environment with plans and methods for rehabilitation, maintenance and increase of the desirable species.

**\*Agriculture 123B — Horticulture (2-3)** A general study of horticulture; the growth and fruiting habits of horticulture plants; a study of the principles and practices of propagating vegetables; fruits and ornamentals, including the methods of handling seed, cuttage, layerage, grafting, budding and bulbs; a study of the planting, fertilization, care, culture, harvesting, handling and utilization of fruit and vegetable crops. Prerequisite: Biology 114B or taken concurrently.

**Agriculture 123C — Marketing of Agriculture Products (3-0)** A study of the general principles, practices, and problems involved in marketing farm products.

**Agriculture 123G — Floriculture for Home (3-0)** Home beautification through the proper use of flowering plants. Selection, culture and use of garden annuals, biennials, perennials, bulbs, and home plants; principles of design and planting methods; garden maintenance; use of fertilizers and composts; pest control; growing structures; and care of cut flowers.



**Agriculture 213 — Methods of Animal Selection (3-0)** A study of the origin, history, and breed characteristics of livestock, including adaptation, distribution, and breed organizations. A detailed study will include the latest methods of animal selection. Prerequisite: consent of instructor.

**Agriculture 213A — Pasture Management (3-0)** The study of grasses. Identification of the genera and species of economic importance in Texas will be stressed. Attention will be given to the economic value of the various grasses and their ecological significance, and to the distribution, propagation, and management of grasses.

**Agriculture 223 — General Veterinary Science (2-2)** An introduction to the physiology and anatomy essential to an understanding of the diseases of farm animals. Emphasis will be placed upon livestock sanitation, and prevention, control and eradication of diseases of farm animals.

## Air Conditioning and Refrigeration

**Air Conditioning 113B — Blueprint Reading (3-0)** Interpreting blueprints related to the installation and servicing of refrigeration and air conditioning units. Reading floor plans, symbols of material and building parts, abbreviations, the architect's scale, reading a scale, measuring blueprints to obtain dimensions, dimensioning standards, wall and ceiling construction, finding structural information on blueprints, types of construction and locating details of blueprints.

**Air Conditioning 111 — Blueprint Reading - Machine Shop (1-0)** This is the first one-third of Air Conditioning 113B offered on a one semester hour basis. Air Conditioning 113B and Air Conditioning 111 cannot both be counted for credit.

**Air Conditioning 111A — Blueprint Reading - Architectural (1-0)** This is the second one-third of Air Conditioning 113B offered on a one semester hour basis. Air Conditioning 113B and Air Conditioning 111A cannot both be counted for credit.

**Air Conditioning 111B — Blueprint Reading - Sheet Metal & Structural (1-0)** This is the third one-third of Air Conditioning 113B offered on a one semester hour basis. Air Conditioning 113B and Air Conditioning 111B cannot both be counted for credit.

**Air Conditioning 113A — Fundamentals of Refrigeration (2-4)** Terminology, laws of refrigeration, absolute pressure and ab-

solute temperature, energy conversion units; specific heat, latent heat, and sensible heat; measurement of heat in quantity and intensity; tone of refrigeration, pressure temperature relationships, transfer of heat by conduction, convection and radiation; elementary refrigeration, methods applicable to air conditioning, and refrigeration.

**Air Conditioning 113D — Fundamentals of Electricity (2-2)** This includes alternating voltage and current; the sine wave; vectors and phasors; phase relationships; inductance; inductive reactance; inductive circuits; capacitive reactance; capacitive circuits; R-C, R-L, and R-L-C Circuits; time constants; vector algebra, resonance, and filters.

**Air Conditioning 123A — Refrigeration Machines (2-4)** Refrigerants and their application in commercial refrigeration; system components, accessories, installation procedures and techniques; diagnosing service problems of mechanical difficulties; methods of defrosting; and making sketches of designs for high, medium, and low temperature installation. Symbols for refrigeration and piping equipment will be used in making sketches.

Prerequisite: AC 113A or consent of the instructor.

**Air Conditioning 123D — Automatic Controls (2-2)** A study of automatic controls and control systems. Time delay relays and switches, power switches, magnetic switches, meters, and application of these devices to control systems. Operation and control of motors, generators, alternators, servomechanisms and other positioning devices.

Prerequisite: AC 113D or consent of the instructor.

**Air Conditioning 213 — Commercial Refrigeration Systems (2-4)** Procedures of load calculating used in commercial refrigeration. Various types of installations are studied with emphasis on the product to be cooled, the desired temperatures to be maintained, and humidity conditions. Problems involving system balance and component capacity. Use of heat load charts, pipe sizing tables, manufactured data, and specification sheets.

Prerequisite: AC 123A or consent of instructor.

**Air Conditioning 213A — Heating (2-4)** Warm air systems, heat emitters, electric heating, forced hot water and steam heating systems including selection and sizing of equipment — registers, grills, furnaces, boilers, radiators, baseboard, piping, and ducts. Fuels and burners used in supplying heat for various types of heating systems — coal, oil, natural gas, manufactured gas, liquified petroleum gas, and electricity. Experiments in equip-



ment selection, installation, adjusting, and servicing will be conducted. Heating layout and specifications for an existing structure or one in blueprint stage will be prepared.

**Air Conditioning 223 — Air Conditioning Principles (2-4)** An introduction to air distribution. Humidity, saturated and unsaturated mixtures; psychrometric charts and graphs; specific heat and air flow calculations, heat load calculations, the state of mixture of two air streams, bypass factor and dehumidification.

**Air Conditioning 223A — Related Problems - System Designs (2-4)** The student will conduct a research project and writing a report which involves an actual installation. This course consists of making drawings that emphasize commercial refrigeration and air-conditioning layouts. Information is gathered, calculations are made, schematic drawings are prepared, and specifications written for the specified installations.

### **\* Art**

**Art 113D — Design I (2-4)** A study of all of the art elements and art principles with emphasis upon two-dimensional designs using a wide range of media and techniques. Text as well as lecture and laboratory study is included.

**Art 113E — Drawing (3-3)** A basic course in the fundamentals of representation through the drawing of simple objects, still lifes, landscapes, and architectural subjects with an introduction to figure drawing. Emphasis is placed on a sound understanding of freehand drawing skills including: line, value, proportion, and perspective through the use of a wide variety of drawing media and techniques. Text as well as lecture and laboratory study is included.

**Art 114B — Art for the Elementary School (Formerly Elementary Design (2-4)** A basic course for the students of elementary school teaching in which they are introduced to the methods of teaching and using a wide variety of techniques and media in creative two- and three-dimensional projects for the appropriate elementary levels. Text as well as lecture and laboratory study is included.

**Art 123D — Design II (2-4)** A continuation of Design I introducing three-dimensional design concepts. Text as well as lecture and laboratory study is included.

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\* Students planning to transfer art credit on a bachelors degree are required to prepare and retain a portfolio of their work to facilitate their transfer.

**Art 123E — Drawing II (3-3)** A continuation of Art 113E with emphasis on drawing the head and human figure using various media and techniques. Basic skeletal and muscular structure of the human figure as related to drawing is included. Text as well as lecture and laboratory study is included.

**Art 113A — Interior Decoration (3-0)** A course experiencing a working knowledge in well-designed floor plans, interiors, and furnishings. Emphasis on the modern trends studies.

**Art 213 — History of Art I (3-0)** A critical and analytical study of painting, sculpture, architecture, and crafts from prehistoric time to the end of the Middle Ages, through the use of slide illustrated lectures and text study.

**Art 223 — History of Art II (3-0)** A critical and analytical study of painting, sculpture, architecture, and crafts from early Renaissance times to the present, through slide illustrated lectures and text study.

**Art 213D — Design III (2-4)** An advanced investigation into a wide range of two-dimensional design problems using various media and methods. Emphasis is placed on technique and individual expression.

**Art 213E — Drawing III (3-3)** A life drawing course with emphasis on the structure and action of the human figure. Text as well as lecture and laboratory study is included.

**Art 213S — Sculpture I (2-4)** A basic study of various sculptural approaches using a wide variety of materials, including both additive and subtractive techniques.

**Art 223O — Painting I (2-4)** An introduction to the problems of painting and composition, in oil and/or acrylic media. Subjects include color and value mixing charts, simple objects, still lifes, and landscapes done in an objective and representational manner.

**Art 213O — Painting II (2-4)** A continuation of Art 213O with emphasis on more creative and experimental areas of painting, including the development of painting styles. A wide range of subjects and techniques including abstraction and non objective art are introduced.

**Art 213C — Ceramics (3-3)** Introduction to ceramic processes. Basic materials and techniques. Hand building, glazing and firing procedure, and introduction to the use of the potter's wheel.



**Art 223C — Ceramics (3-3)** Problems in ceramics. Personal and professional development in forming and decorating techniques. Emphasis on mastery of potter's wheel, glaze calculation, and casting methods.

## Banking

**Banking 111 — Planning Management Development (2-0)** This middle management seminar is designed to assist bank officers who are responsible for the planning, recruiting, and development of bank management personnel. Cases and outside readings are used in this seminar. It can be presented as a brief, intense workshop or as a twelve-session seminar.

**Banking 111A — Loss Prevention (1-0)** This seminar focuses on check cashing, check swindles, bank holdups, and security procedures.

**Banking 111B — Bank Management by Objectives (1-0)** This middle management seminar is designed to assist bank officers in learning how to translate bank problems into realistic goals, for the individual and the bank, through the management-by-objectives system. Cases and outside readings are used in this seminar. It can be presented as a brief, intense workshop or as an eight-session seminar.

**Banking 112 — Orientation to Banking (2-0)** This course is designed to combine Selling Bank Services and The Starter Series. Designed for tellers and new-accounts personnel, it is directed toward meeting customer needs in regard to checking accounts, saving services, loans to individuals, safe deposit boxes, and other services. It also includes an orientation of new employees in regard to developing an acceptable personal image and discover their place in Banking.

**Banking 122 — Loan and Discount (2-0)** This seminar teaches bank employees the essential facts about promissory notes, including calculating interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks, and the concepts of attachment, perfection, priority, default, and foreclosure.

**Banking 113 — Principles of Bank Operations (3-0)** This course presents the fundamentals of bank functions in a descriptive

fashion so that the beginning banker may view his chosen profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement.

**Banking 113A — Bank Letters and Reports (3-0)** This course is designed for those bank officers, supervisors, and employees who dictate or review correspondence. Since bank letters are actually public relations documents, all persons should be familiar not only with the mechanical forms of bank letters but also with the psychological principles that help the letter writer achieve best results. The course review letter forms, emphasizes fundamental principles underlying modern correspondence, and examines different kinds of bank letters.

**Banking 113B — Savings and Time Deposit Banking (3-0)** This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the saving process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real saving that appears as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment.

**Banking 113S — Credit Administration (3-0)** This course, directed toward the executive level, concerns itself partly with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation and analysis, credit techniques, specific credit problems, and regular, as well as unusual types of loans are discussed.

**Banking 123S — Money and Banking (3-0)** This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needs by the banking student to apply his knowledge to his particular job. Historical treatment has been kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios.



**Banking 211 — Conference Planning and Leadership (1-0)** This course is centered on a specific phase on the problem of human understanding. It is concerned with an important responsibility of management; to communicate and to coordinate ideas in the most effective way possible. It gives consideration to the dynamics of human interaction in groups convened to solve problems and make decisions. The essentials of parliamentary procedure are also stressed, thus presenting an effective technique for achieving consensus and formalizing and recording the decision-making process.

**Banking 213 — Bank Investments (3-0)** Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course describes the nature of such funds and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial banks, the sources of reserves, and their random and cyclical fluctuations, showing the influence of these factors on investment policy. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings.

**Banking 213A — Bank Management (3-0)** This course is based on the second edition of the text that presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. Since case study is becoming well established as an effective management learning technique, this text also introduces the use of cases as a new element.

**Banking 213B — Trust Functions and Services (3-0)** This new course presents a complete picture of the services rendered by institutions engaged in trust business. Providing an introduction to the services and duties involved in trust operations, the course is intended for all bankers, not only those who are engaged in trust business. It endeavors to keep clear the distinction between business and legal aspects of trust functions.

**Banking 223 — Installment Credit (3-0)** In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its profits on this particular kind of credit. Other topics

discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending.

**Banking 223A — Analyzing Financial Statements (3-0)** A fourth edition of the textbook is used for this course and is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis.

**Banking 223B — Financing Business Enterprise (3-0)** Stress is placed on the difference between lending and investing, and on the fact that investing in a corporation and financing a corporation are different aspects of the same subject. In this course, the material is presented from the viewpoint of the corporate treasurer who must safeguard the financial future of his corporation.

**Banking 223C — Argumentation and Debate (3-0)** This course is planned to set forth the principles of argumentation, so that the debater will have the necessary background for the development of his own technique. It describes the analysis of the debate subject, gives the principles of logical argument, and suggests how the case may be presented most effectively.

**Banking 223D — International Banking (3-0)** The second edition of this text is an introduction to a vast field for those working in international departments, as well as for those involved in the domestic activities of their banks. The essential objective of this course is to present the basic framework and fundamentals of international banking, how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another.

**Banking 223E — Law and Banking (3-0)** An introduction to basic American law, presenting the rules of law which underlie banking. Topics include jurisprudence, the court system and civil procedure, contracts, quasicontracts, property, torts and crimes, agencies, partnerships, corporations, sales of personal property, commercial paper, bank deposits and collections, documents of title, and secured transactions. Emphasis is on the Uniform Commercial Code.



**Banking 223F — Effective English (3-0)** This course seeks to impress upon the student the need to consider both the purpose of the communication and the person who will receive it. The text explains the fundamental principles for using the English language. It points out the ways in which communication may be heightened by proper use of the techniques of language. It also is concerned with the mastery of language through wide reading, and interest in words, and practice in writing.



## Biology

**Biology 114 — Animal Biology (3-3)** An introductory study of the nature of protoplasm and the structure and function of cells is followed by a survey of the animal kingdom, with emphasis on such forms as are of human interest or application. There follows a study of adaptations in selected types as a basis for a consideration of the origin of species and the principles of organic evolution. This course may be followed, or preceded, by Biology 124B by students desiring a year of general biology; it should be followed, or preceded, by Biology 124 by those desiring general zoology.

**Biology 124 — Animal Biology (3-3)** A study of organ systems of vertebrates, with special reference to man, followed by an introduction to embryology and to the basic principles of heredity.

**Biology 124B — General Botany (3-3)** An introduction to the plant kingdom with emphasis on the importance of plants to man.

**Biology 113B — Anatomy and Physiology (3-2)** A study of the anatomy and physiology of the human body. It emphasizes biological principles as applied to vertebrates in general and man in particular.

**Biology 123B — Anatomy and Physiology (3-2)** A continuation of Biology 113B. Prerequisite: Biology 113B.

**Biology 114A — Microbiology (3-2)** The characteristics and activities of microorganisms and their relation to health and disease.

**Biology 224 — Comparative Vertebrate Anatomy (3-4)** A comparative study of the morphology, physiology, and phylogenesis of vertebrate organ systems. Required of pre dental, premedical and biology majors. Prerequisite: Biology 114 and 124 or 124B.

## Business Administration

**Business Administration 113 — Oil and Gas Law (3-0)** A course designed for those employed in petroleum production, leasing, scouting and other oil industry activities.



**Business Administration 113A\* — Elementary Accounting (3-0)**

Fundamental principles of double-entry bookkeeping applied to a sole proprietorship. Emphasis is given to the following records: financial statements, work sheet, special journals, fixed assets and depreciation, notes, and a practice set covering the complete bookkeeping cycle.

**Business Administration 123A\* — Elementary Accounting (3-0)**

A continuation of Elementary Accounting 113A. Attention is given to accrued income, accrued liabilities, deferred charges, depreciation, bad debts, taxes, reserves, controlling accounts, and business vouchers. Accounting for partnerships and corporations is introduced.

Prerequisite: Elementary Accounting 113A.

**Business Administration 123B — Federal Tax Accounting (3-0)**

This course deals primarily with the current federal income tax laws. While some attention is given to the economic, social and historic viewpoints, major emphasis is placed on the technical and accounting aspects, including the preparation of income tax returns.

Prerequisite: Instructor's consent.

**Business Administration 113B — Introduction to Business (3-0)**

A general business course designed to give the student an understanding of the fundamental principles of business operation.

**Business Administration 113C — Business Correspondence (3-0)**

A study of grammar, punctuation, sentence structure, paragraphing and composition of business letters.

**Business Administration 113D — Business Mathematics (3-0)**

This course covers the simpler exercises and problems of everyday business calculations — including such topics as the use of aliquot parts, practice on short methods of calculation, fractions, percentage, interest and discount, bonds, depreciation, social security, taxes, property taxes, insurance and stocks.

**Business Administration 113E — Personal Finance (3-0)** Topics studied include inflation, tax problems, insurance, annuities, credit, home ownership, bank accounts, and investments.

Prerequisite: Instructor's consent.

**Business Administration 113G — Office Practice (3-0)** Development of knowledges and skills in payroll, business forms, and posting-bookkeeping machines.

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\* Business Administration 113A - 123A does not meet the baccalaureate degree requirements in Accounting.

**Business Administration 123G — Office Practice (3-0)** Development of knowledges and skills in office procedures including key-punch keyboard simulation. Business etiquette, personality development, group and individual office contacts.

Prerequisite: Business Administration 113G and concurrent enrollment in EDP 111.

**Business Administration 113M — Office Machines (3-3)** A course planned to develop in the student a working knowledge of a variety of adding - listing machines and calculating machines.

**Business Administration 113R — Business English (3-0)** Fundamentals of grammar, punctuation and sentence structure as employed in written business communications. Work study; sentence analysis; punctuation; paragraphing; planning.

**Business Administration 113T — Typewriting (1-5)** A beginner's course in typewriting. Exercises for the mastery of the keyboard by the touch system, instruction in the care of the machine, introduction of form and arrangement of simple business letters, and simple centering, tabulation, and manuscripts.

**Business Administration 123T — Intermediate Typewriting (1-5)** For those students who have had typewriting in high school or who have had BA 113T. Preparation of business letter, typing of business letter, tabulating of materials, typing of manuscripts.

**Business Administration 113F - 123F — Secretarial Practice (3-0)** A course designed for students who are interested in the secretarial field. It covers office ethics, duplicating machines, transcribing machines, filing and postal information; practice is given in interviewing callers, attending business conferences, and in telephone techniques.

**Business Administration 113S — Beginning Shorthand (3-3)** Introduction of principles of Gregg Shorthand, Diamond Jubilee series. Includes development of ability to read and write shorthand outlines. Attention is given to the improvement of shorthand characters and phrasing skills.

**Business Administration 111S — Beginning Transcription (0-3)** Must be taken concurrently with B.A. 113S. The purpose of this course is to introduce students to the standards necessary in producing mailable transcripts, grammar, spelling, and punctuation correctness and use of forceful English.

**Business Administration 123S — Intermediate Shorthand (3-3)** Prerequisite: Satisfactory completion of B.A. 113S and B.A. 111S



or one year of shorthand in high school; satisfactory completion of B.A. 113T or one year of typing in high school. Application of principles of Gregg Shorthand to develop the ability to take and accurately transcribe shorthand notes at increased dictation speeds.

**Business Administration 121S — Intermediate Transcription (0-3)**

Must be taken concurrently with B.A. 123S. This course is required to attain proficiency in mailable transcriptions. Emphasis is given to vocabulary building and timed typewritten transcription of shorthand notes for mailable letters.

**Business Administration 213S — Advanced Shorthand (3-3)**

Prerequisite: Satisfactory completion of B.A. 123S and 121S. Further development of shorthand skills to attain proficiency required for stenographic work. Emphasis on speed building and specialized dictation of various professions.

**Business Administration 211S — Advanced Transcription (0-3)**

Must be taken concurrently with B.A. 213S. This course is required to attain proficiency in mailable transcriptions. Emphasis is upon specialized dictation, mailable transcriptions, and vocabulary building. Development of high-level skill in production work in order to meet office standards.

**Business Administration 223S — Specialized Shorthand (3-3)**

Prerequisite: Satisfactory completion of B.A. 213S. Proficiency in taking all types of office materials from dictation is emphasized. Students may elect to specialize in any three secretarial areas: executive, legal, or medical.

**Business Administration 221S — Advanced Specialized Transcription (0-3)**

Must be taken concurrently with B.A. 223S. This course is required to attain proficiency in dictation and transcription of legal documents, medical records and forms, and executive correspondence and materials.

**Business Administration 123 — Secretarial Accounting (3-0)**

A study of the fundamentals of double-entry bookkeeping and their direct application to various business and professions — insurance, law, service operations, medicine, retail stores, and corporations — including the analysis of accounts and the preparation of accounting statements.

**Business Administration 213L — Business Law (3-0)**

Fundamentals, contracts, agency, negotiable instruments, property, and real estate. General principles involving law or bailments, sales, conditional sales, agency, negotiable instruments as they appear in actual cases illustrating practical business problems.

**Business Administration 223F — Executive Secretaryship (3-0)**

A course which analyzes the many diversified responsibilities of an executive secretary as an office supervisor.

This study emphasizes secretarial alertness to office problems, as well as the awareness of modern techniques in office management, case studies of secretarial procedure in the different business organizations, and the application of business ethics and office etiquettes.

This course is primarily designed for those sophomore secretarial students who have credit for college secretarial practice and advanced college shorthand during the freshman year.

Other students may be admitted with consent of the business faculty.

**Business Administration 214-224\* — Principles of Accounting (3-3)**

The principles of accounting for a single proprietorship organization. A study of the accounting equation, business transactions, business papers, ledgers, books of original entry, classifications and interpretation of accounts and statements, valuation accounts, accrued and deferred items, and the accounting cycle.

Second Semester — Accounting for partnership and corporate business enterprises. A study of the characteristics and records of each organization. Also, cost systems and budgetary controls. Accounting for funds, for management reports, and special analyses.

**Business Administration 213F — Business and Industrial Psychology (3-0)**

The psychological factors operating in business and industry. Employment procedures, personnel testing, attitude analysis, motivation, morals, advertising, and consumer market opinion and motivation research.

**Business Administration 213I — Survey of Insurance (3-0)**

A general introductory course dealing with the theory and practice of insurance and its economic and social significance. A critical examination is made of the various types of life, fire, and automobile contracts available for protection against personal and business risks. In addition a brief study is made of State and Federal insurance plans, suretyship, and other casualty and property coverage.

**Business Administration 213N — Salesmanship (3-0)**

A course dealing with the principles of personal salesmanship, with a study of methods, problems, and routine duties of a salesman.

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\* Required in baccalaureate degree programs in Business Administration.



**Business Administration 213T — Advanced Typewriting Problems (1-5)** This course includes business reports, business documents, legal documents, tabulation, statistical material, manuscripts, cutting stencils, various forms of business letters and a continued emphasis upon typing speed and efficiency.

**Business Administration 223L — Secretarial Procedures (Legal) (3-2)** This course emphasizes the professional rather than the purely routine or clerical aspects of the work of the legal secretary because of the tremendous need for improved professional standards for legal secretaries. This course is designed to fill a void in education for the legal secretarial profession.

**Business Administration 223M — Secretarial Procedures (Medical) (3-2)** This course emphasizes the professional rather than the purely routine or clerical aspects of the work of the medical secretary because of the tremendous need for improved professional standards for medical secretaries. This course is designed to fill a void in education for the medical secretarial profession.

**Business Administration 223S — Business and Industrial Sociology (3-0)** Principles of work relations in jobs, emphasis on social relations of groups and occupations. Rise, scope, and major problems of industrial sociology. Social adjustment of the workers and social organization of work plant as integral parts of society.

**Business Administration 221A — Business and Industrial Sociology (1-0)** This is the first one-third of Sociology 221 offered on a one semester hour basis.

**Business Administration 221B — Business and Industrial Sociology (1-0)** This is the second one-third of Sociology 221 offered on a one semester hour basis.

**Business Administration 221C — Business and Industrial Sociology (1-0)** This is the third one-third of Sociology 221 offered on a one semester hour basis.

## Chemistry

**Chemistry 113 — Introductory Chemistry (3-2)** Non-technical course which meets the needs of those who do not expect to specialize in science, engineering or medicine. The course content is devoted to a survey of the principles of inorganic chemistry. Must be followed by Chemistry 123 to satisfy a Physical Science requirement.

**Chemistry 123 — Introductory Chemistry (3-2)** A continuation of

Chemistry 113. Subject matter includes an introduction to the fields of organic and biochemistry. Prerequisite: Chemistry 113.

**Chemistry 113N — Introduction to Inorganic Chemistry (3-2)**

This course is designed to meet the requirements of the nursing profession. The course content includes a study of the principles of inorganic chemistry with lectures and laboratory work sufficient for an understanding of fundamental principles.

**Chemistry 123N — Introduction to Organic and Physiologic Chemistry (3-2)**

A continuation of Chemistry 113N covering elementary organic and biochemistry, including nomenclature and reactions of aliphatic and aromatic compounds, carbohydrates, fats, proteins, blood, urine, vitamins and hormones. Prerequisite: Chemistry 113N.

**Chemistry 113D — Elementary Chemistry (3-2)** A one semester course covering elementary inorganic, organic and biochemistry. Especially suited to those persons interested in Dental Hygiene.

Note: Neither Chemistry 113-123, 113D, nor 113N-123N can be substituted for Chemistry 114-124 in meeting prerequisites in scientific curricula.

**Chemistry 114 — General Chemistry (3-4)** A course serving the prerequisite requirement for engineering, medicine, dentistry, and other professional courses requiring advance work in chemistry. Lectures, demonstrations, and laboratory work sufficient for an understanding of fundamental principles. Laboratory work includes introduction to quantitative and volumetric analysis.

**Chemistry 124 — General Chemistry (3-4)** A continuation of Chemistry 114, requiring study of equilibrium, acid-base concepts, and qualitative analysis. Prerequisite: Chemistry 114.

**Chemistry 214 — Organic Chemistry (3-4)** An introduction to the chemistry of the compounds of carbon for science majors. The reactions of aliphatic and aromatic compounds are considered in terms of carbonium ion, carbanion and free radical reaction mechanisms. Stereochemistry and molecular conformations are also considered. Laboratory work offers opportunity for the student to familiarize himself with reactions, properties, and relations of typical organic compounds. Prerequisite: Chemistry 124.

**Chemistry 224 — Organic Chemistry (3-4)** A continuation of Chemistry 214, requiring study of carboxylic and sulfonic acids, amines, ethers and phenols. Carbonyl and polyfunctional compounds are also considered. Prerequisite: Chemistry 214.



## Dental Assisting

**Dental Assisting 112 — Orientation (2-0)** Survey of dental hygiene, dentistry, and related professions, personal and oral health. Introduction to patient education.

**Dental Assisting 113 — Introductory Dental Science (3-2)** Dental Radiography principles and practice. Microbiology with emphasis on oral bacteria and immunology. Principles and practice of sterilization. Introduction to human anatomy, physiology, and patient and office management.

**Dental Assisting 112A — Principles of Dental Assisting (1-2)** Detailed study of the art of dental assisting.

**Dental Assisting 113A — Dental Anatomy (1-4)** Morphology of tooth structure.

**Dental Assisting 123 — Oral Anatomy (3-0)** Anatomy of head and neck with emphasis on oral structures and their functions.

**Dental Assisting 123A — Advanced Dental Science (4-11)** Study of materials used in dentistry; laboratory training in handling materials and in dental laboratory procedures. Introduction to manifestations of oral diseases, the use of anesthetic agents and the dental auxiliary's role in their administration. Detailed study of dental office management. Study of dental specialties, dental literature, and dental health materials.

**Dental Assisting 123B — Practicum in Dental Assisting (0-12)** Supervised clinical practice of dental assisting in selected facilities.

## Dental Hygiene

**Dental Hygiene 113 — Oral Anatomy and Physiology (2-2)** Objectives: Morphology, nomenclature, and function of teeth and their related structures, dentoosseous structures will be studied in relation to their nerve and blood supply. T M J articulation, muscles of mastication and facial expression, injection sites, and occlusion with a basic background in dental anatomy and physiology, which also includes head and neck. The student will be able to recognize normal clinical appearance of anatomical features of the oral cavity, head, and neck. These goals are subordinate to criteria for objectives in Clinical Dental Hygiene, Oral Pathology, and Periodontology.

The laboratory will enable the student to learn to compare anatomical radiographic landmarks with the skull, polish anatomy into amalgams, carve wax restorations, identify tooth crown and roots by name, arch, and side.

**Dental Hygiene 113A — Oral Histology and Embryology (3-0)**

The course is designed to acquaint the student with the micro-anatomy of the structures of the oral cavity, their development and their function. The course is designed to help the student understand the normal and abnormal histology of the oral cavity, especially the pulp and periapical, periodontal and dentoalveolar tissue. The objective of the course is to give the student a sound understanding of the tissues of the oral cavity.

**Dental Hygiene 115 — Dental Hygiene Technique 1 (4-6)** The lecture portion of this course is designed to teach (1) the principles of the mirror, probe, explorer, jacquette, curet, hoe, chisel, and file. Theory of scaling and root planing, gingival curettage, polishing procedures, medical and dental history, oral inspection, occlusion, and charting are taught in conjunction with instrumentation principles (2-0); (2) the nature and behavior of x-rays. Two techniques, bisecting angle and paralleling, are discussed, demonstrated, and practiced. Developing procedures, usage of dental radiographic surveys, and proper patient handling is taught and practiced (2-0).

The laboratory portion (0-6) is composed of manikin training and proper instrumentation on student partner. Instrument sharpening and sterilization techniques are taught along with other theory discussed above.

**Dental Hygiene 122 — Periodontology (2-0)** The purpose of this course is to acquaint each student with the role of the dental hygienist in periodontics. Emphasis is placed on anatomy and physiology of the periodontium and the etiology of the periodontal disease. Preventive periodontics is stressed from a biological viewpoint. A thorough understanding of these topics is necessary for the application of preventive and therapeutic techniques.

**Dental Hygiene 122A — General Pathology (2-0)** The purpose of this course is to present pathology in a compact and concise, but comprehensive form. Special emphasis is given in those areas which pertain directly to the practice of dentistry and dental hygiene. The course is based upon the text and augmented by appropriate reading assignments.



**Dental Hygiene 122C — Dental Hygiene Clinic (0-8)** Practical application of the principles learned in DH 112 lecture begins with clinical practice on patients. Care of equipment, sterilization techniques, preventative procedures, and topical application of fluoride is demonstrated and put into practice as students see patients.

**Dental Hygiene 122D — Dental Hygiene Technique (2-0)** A more thorough discussion of the theories and principles taught in DH 112 is presented. Dental health education and preventive measures are discussed in detail.

**Dental Hygiene 213 — Dental Hygiene Clinic (0-12)** Application of principles and skills are developed which are learned in Dental Hygiene 122. Students must complete a maximum number of prophylaxis, x-rays, and controls to complete their clinical requirements.

**Dental Hygiene 212 — Pharmacology (2-0)** The object of this course is to instruct the dental hygiene student in the fundamental aspects of pharmacology and their relationship to dentistry. Included will be the study of dosage, methods of administration, and therapeutic use of preparations in dentistry.

**Dental Hygiene 212D — Clinical Nutrition (2-0)** Basic concepts and scientific knowledge concerning nutrients and food with specific emphasis on the art of nutrition in dentistry and its effect on the oral and para-oral structures.

**Dental Hygiene 212A — Oral Pathology (2-0)** The object of the course is to instruct each student in the fundamental principles of disease processes as they affect the oral cavity. Emphasis will be placed upon both microscopic and clinical appearances of oral lesions. The course provides both an understanding of the pathological developments of oral lesions and a frame of reference for both the diagnosis and the prevention of disease.

**Dental Hygiene 212B — Dental Materials (1-2)** A general study of sources, properties, uses, and techniques of manipulation of the materials commonly used in dentistry. The students will apply the principles in the laboratory.

**Dental Hygiene 222 — Dental Health Education (2-0)** A study of methods and materials used in teaching dental health, including educational psychology and philosophy, to the laity in schools and community, and especially to patients in the practice of dental hygiene. This course is mainly concerned with a group of people who would not normally be seen as patients. The students

should try to achieve a sustained change in oral hygiene and attitude. Follow-up after 6 weeks to see if there has been improvement in oral hygiene and attitude. Methods of effective speaking will be presented by the staff of the speech department.

**Dental Hygiene 222A — Ethics, Jurisprudence, Ofc. Mgt. (2-0)**

Dental ethics, and legal principles for the practicing dental hygienist. Lectures in office management and procedures.

**Dental Hygiene 213A — Seminar (3-0)**

The object of this course is to aid the students in learning how their course work is clinically oriented. Sample board questions will be constructed in group work and interchanged with other groups. Students are also encouraged to discuss clinical problems and situations to which solutions may be found by open discussion.

**Dental Hygiene 225 — Dental Specialties (5-0)**

The specialized areas of dental practice are described with the objective of providing a broad background of information that can facilitate the attainment of the requisite degrees of understanding and appreciation. It is intended to assist in establishing a proper prospective of dental hygiene in its relationships to the subdivisions of dentistry. Principles of advanced dental hygiene procedures will be covered under the appropriate subdivisions.

**Dental Hygiene 223 — Dental Hygiene Clinic (0-12)**

Continuation of Dental Hygiene Clinic with emphasis placed on the ultra sonic scaling procedures and expanded duty procedures.

## Drafting

**Drafting 111 — Blueprint Reading (1-0)**

Interpretation of blueprints with emphasis on the obtaining of information from mechanical and electronic blueprints for Petroleum Technology majors.

**Drafting 113A — Engineering Drawing (2-4)**

A course designed to cover the basic requirements for an engineering degree with extra emphasis put on drafting skills. The material covered includes lettering, instruments and their use, applied geometry, orthographic freehand and instrument drawings, auxiliary views, sections and conventions, pictorial drawings, dimensions and notes, threads and fasteners, working drawings, charts, graphs and diagrams. Term project — a set of working drawings of a piece of equipment having three or more parts.



**Drafting 113B — Freehand Drawing (2-4)** A course designed for the draftsman to develop the skill to do good orthographic and pictorial freehand drawings. Air brush techniques, charts, graphs, and diagrams are also included. Several types of pictorial drawings will be studied and practiced, such as Axonometric, (Trimetric, Diametric, Isometric), Oblique (Cavalier, Cabinet, and projection). Perspective (1, 2, and 3 point perspective and the measuring point method). Pictorial sectional and exploded drawings will be stressed along with product illustration.

**Drafting 123A — Architectural Drawing (2-4)** A course in home planning with emphasis on details. A complete set of plans for a one-story home is required with Specification Requirements.

**Drafting 123B — Mechanical Drawing (2-4)** A second course in Mechanical Drawing. A further study into fundamentals such as keys, springs, gears, cams, jigs and fixtures. Emphasis is placed on the use of the American Standards, Machinery Handbook & Appendix to acquaint the student with industrial practices in making details, assembler and isometric drawings.

**Drafting 213A — Machine Drawing (2-4)** Machine drafting, including details and assemblies of machine parts, jigs and fixtures, with emphasis on the use of American Standards. Templates and industrial drafting equipment. Additional time is spent on drafting in the welding, structural, and piping fields.

**Drafting 213D — Descriptive Geometry (2-4)** A course involving the principles and application of orthographic projection; space relations of points, lines, and surfaces; the true length of lines in space; space surfaces and intersections and developments; intersections of curved surfaces, cylinders, cones, and spheres; highway, geology and mining problems.

**Drafting 213P — Pipe Drafting (2-4)** This course includes pipe terminology, fittings, flow diagrams, piping design notes and plans, processing equipment, isometric and theory problems with mathematics approach. Reference Manufacturers catalogues for data will be used.

**Drafting 223B — Map Drafting (2-4)** Map Drafting emphasizing lettering, symbols, scales, lease maps, township maps, highway maps and computations, pipe lines, mapping by coordinates and from surveying notes. Most of the work is in ink, using paper linen and some of the plastics. Some work is done in topography and aerial maps using Edgar Tobin's "Maps for the Oil Industry" as a text. Includes field problems with practical application of

surveying instruments. Use of the planimeter, calculator, slide rule and computer calculations.

**Drafting 223A — Manufacturing Design, Materials and Processing (2-4)** This course is designed to include the theory of design, the study of the properties of metals, plastic, and the manufacturing and processing of articles by casting, forming, and machining. A part of the course includes cost analysis covering manufactured articles as well as the building industry.

**Drafting 223C — Plane Surveying (2-4)** The use and care of surveying instruments, plane surveys with Transit, and tape, profiles and topography with level, computing cross sections, mapping from notes and computations, using coordinates, and map making with the plane table.

**Drafting 223E — Electronic Drafting (2-4)** A course designed to cover the basic requirements for electrical and electronic drafting as applied in industry. The material covered includes theory of electronics, schematics, printed circuit boards and wiring diagrams.

**Drafting 223S — Structural Drafting (2-4)** This course includes the preparation of design and working drawings for buildings, bridges, tanks, towers and other structures. The student will become familiar with materials and design connections to transmit forces from one member to another. Emphasis will be placed on the use of Smoley's Combined Tables and the Manual of Steel Construction.

Prerequisite — Engineering Drawing or consent of instructor.

## Earth and Space Studies

**Geology 114 — General Geology (3-3)** Physical geology processes modifying the earth's surface; materials and features of the earth's crust. Laboratory work in cartography, mineralogy, and petrology.

**Geology 124 — General Geology (3-3)** Historical geology; the history of the earth through geologic times as revealed by rocks and fossils; the origin and development of plant and animal life. Laboratory work in paleontology.

**Astronomy 113 — A Survey of Astronomy (3-0)** The main features of the known universe and the principles involved in their discovery. A non-mathematical survey recommended for all students.



**Astronomy 123 — A Survey of Astronomy (3-0)** A continuation of Astronomy 113.

**Geology 213 — Mineralogy (2-8)** Introductory course in the study of minerals, including elements of crystallography; determination of the common minerals by their physical properties.

Prerequisite: Trigonometry, Geology 124, and Chemistry 114.

**Geology 223 — Petrology (2-4)** Origin, mode of occurrence, and determination of the common types of igneous, sedimentary, and metamorphic rocks.

Prerequisite: Geology 213.

**Geology 223A — Invertebrate Paleontology (2-4)** Invertebrate, phyla; sponges, coelenterate, echinodermata, brachiopods, mollusks, and arthropods, stratigraphic and evolutionary paleontology.

Prerequisite: Geology 114-124. Two lectures and four laboratory hours a week.

**Geography 223 — World Geography (3-0)** The earth, its climatic regions; the relation of human activities to physical environments; major cultural divisions and selected regions and countries.

## Economics

**Economics 213 — Principles of Economics (3-0)** An examination of fundamental economic concepts and principles.

Prerequisite: Sophomore standing recommended.

**Economics 223 — Economic Problems (3-0)** A study of contemporary economic issues and problems.

Prerequisite: Sophomore standing recommended.

## Education

**Education 113 — Introduction to Educational Psychology (3-0)** An introductory study of mental life and the psychological principles underlying motivation, behavior, individual differences, and the learning processes.

**Education 123 — Introduction to Education (3-0)** A brief survey of the general field of education brought out through a study of the evolution of the present-day public school and its practices.

## Electronics

**Electronics 113 — DC and AC Theory and Circuits (3-0)** A basic course in direct and alternating current. AC and DC circuit parameters, Ohm's law, magnetism, vector algebra, circuit laws and theorems, reactive components, three phase circuit characteristics, power measurement, resonance, and filters.

**Electronics 113E — Basic Electronics Survey (3-0)** A beginning survey of electronics for non-major. Covers basic electrical theory. Introduces the student to a wide variety of components and equipment most common to industry. (For non-electric majors only.)

**Electronics 113L — Basic Electricity Laboratory (2-4)** The laboratory consists of tests and measurements of electrical circuits at low and medium frequency. Familiarization of component parts. Voltage and current measurement. Measurement of power in AC and DC circuits. Resistive and reactive networks.

**Electronics 113M — Elementary Circuit Analysis (3-0)** This course is for the purpose of learning the primary language of electronics, to which all future learning must be related. It is a study of methods; it begins with combining two simple electrical quantities, and includes all of the terms, tools, and procedures used to determine resultant quantities of voltage and current present at all points in resistive circuits and networks.

**Electronics 123 — Industrial Electronics (3-0)** A study of power amplifiers, voltage amplifiers, audio and radio-frequency amplifiers. Compensating networks, gain problems and high and low frequency response. Detection of Radio and Picture carrier signals. Intermediate frequency amplifier and noise reduction circuits.

**Electronics 123A — Power Distribution (3-0)** A course in power distribution, generating and transmission systems, load center distribution, substation operation, system and line protection fault detectors, and electric utility practices, polar and rectangular conversion.

**Electronics 123B — Electrical Instruments and Measurements (3-0)** The mechanics and the science of electrical measurements are given thorough treatment in the course. Starting with basic indicating instruments and continuing through complex integrating devices, both the operating principles and the "hardware" are studied. Range extending devices, rectifiers, bridges, and transformers are used to study metering systems for typical job requirements. Mathematical analysis is used throughout the course.



**Electronics 123C — Electrical Power Systems (3-0)** A study of the design, operation and technical details of modern power distribution, and protection devices. System load analysis, rates, and power economics are studied.

Prerequisite: Electronics 113

**Electronics 123D — Automatic Controls (3-0)** A study of automatic controls and control systems. Time delay circuits, power control, digital and analog control devices, and applications to control systems. Operation and control of motors, generators, alternators, servomechanisms and other positioning devices.

**Electronics 123E — Operating Problem Analysis (3-0)** A study is made of the proper procedures to be used in testing for troubles of electrical systems and their correction. The methods used in setting up and supervising a program of preventive maintenance, trouble-shooting, and data recording are studied.

Prerequisite: Electronics 113

**Electronics 123L — Basic Electronics Laboratory (2-4)** Tests and measurements of standard amplifier circuits. Voltage gain and power gain measurements. Impedance matching, Coupling circuits. Application of amplifiers to control devices with emphasis on solid state.

**Electronics 123M — Advanced Circuit Analysis (3-0)** This course is an extension of the study of electronics language, and examines the terms, tools, and procedures necessary for complete AC circuit analysis, such as determination of power consumed, and current and voltage present in components of series-parallel circuits with resistance, inductance, and capacitance. The special terms peculiar to electronics math (operator  $j$  etc.) are explained, and the most common mathematical manipulations necessary to electronics circuit analysis are covered.

**Electronics 213A — Digital Computer Fundamentals (3-0)** Basic concepts of digital computers and other digital devices, machine language, number systems (Binary), basic logic circuits, derivations of Boolean expressions, arithmetic elements, and the memory element.

**Electronics 213B — Semiconductors I (3-0)** An introduction to solid state theory through a study of linear circuits based on the operation of semiconductor diodes, transistors, unijunction and field effect transistors, and their h-parameters.

**Electronics 213C — Semiconductors Laboratory I (2-4)** Laboratory experiments covering the linear operation of the common collector, common emitter, common base, and the parameters involved.

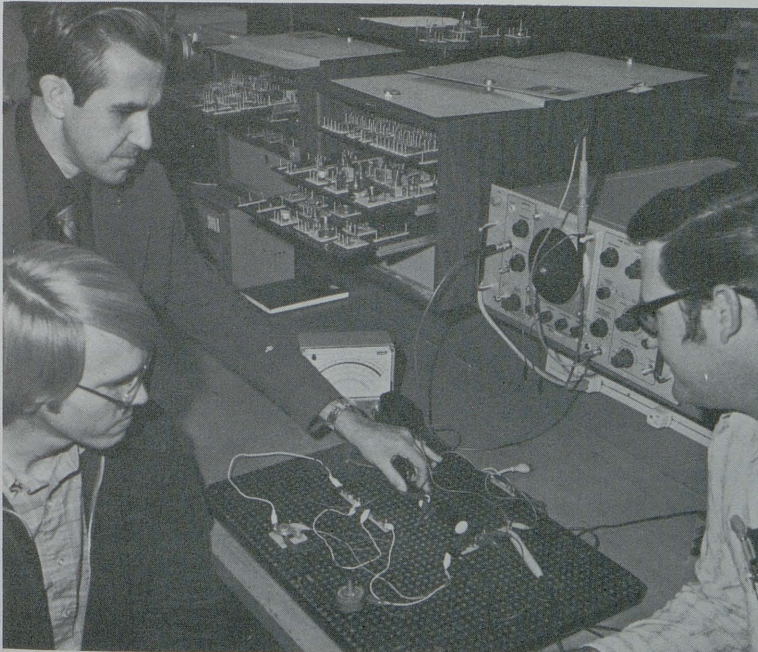
**Electronics 223 — Industrial Instrumentation Fundamentals (3-0)** Instrument application. Energy and force systems, heat transfer. Electrical and mechanical transducers, liquid and gas flow measurements, liquid level measurements, temperature measurements. Potentiometric devices, indicating and registering equipment, humidity measurements, specific gravity, telemetering.

**Electronics 223B — Semiconductors II (3-0)** A continuation of semiconductors study covering the non-linear devices and non-linear circuits through a study of oscillators (square & pulse), silicon controlled rectifiers, photo diodes, and special digital type circuits.

Prerequisite: Electronics 123 or on instructors' approval.

**Electronics 223C — Semiconductors Laboratory II (2-4)** Further experimentation with the semiconductor. The implementation of non-linear devices such as silicon controlled rectifiers. Also circuit experiments utilizing special digital circuits such as the schmitt trigger and other logic circuits.

Prerequisite: Electronics 123 or on instructors' approval.





## Electronic Data Processing

**Electronic Data Processing 111 — Key Punch (0-2)** Basic fundamentals and operation of the Key Punch machine.

**Electronic Data Processing 113A — Introduction to Computer (3-0)**  
An introduction to Computer concepts basic to all computers, such as magnetic storage, number systems, internal operations, information retrieval.

**Electronic Data Processing 113B — Elementary Programming (3-3)**  
Introduction to Business Programming using the RPG Language. Covers file definitions, input, output, calculations, and table handling. Program Coding and debugging in the RPG Language.

**Electronic Data Processing 123A — Intermediate Programming (3-3)**  
An introduction to Programming Techniques using Assembly Language. Includes flowcharting, record layouts, and documentation. Writing source programs, compiling, and debugging in Assembly Language.

Prerequisite: EDP 113A or consent of the instructor.

**Electronic Data Processing 123B — Computer Operating Systems (3-3)**  
Individual instruction and operations of computer operating procedure; study of supervisor, job control, link edit, file maintenance, compilations.

**Electronic Data Processing 123C — Management Computer Use (3-0)**  
A study of Computer equipment and techniques designed specifically to create better communications between non-technical management and computer technicians at all levels.

**Electronic Data Processing 213A — Advanced Programming (3-3)**  
Business report preparation through the use of USA Standard COBOL. Stresses the use of basic COBOL Module Statements which are available in all standard COBOL compilers. Several COBOL Programs are written, compiled, debugged, documented, and put into operation by the student.

Prerequisite: EDP 123A or consent of the instructor.

**Electronic Data Processing 213B — Systems and Procedures I (3-0)**  
Systems fundamentals, machine indoctrination, and essential operations are presented with the view of operating in an EDP environment.

**Electronic Data Processing 213C — Advanced Assembly Programming (3-3)**  
A continuation of Electronic Data Processing

123A using advanced techniques of programming with Assembly Language.

Prerequisite: EDP 123A or consent of the instructor.

**Electronic Data Processing 223A — Systems Programming (3-3)**

A continuation of the study of the COBOL Language with emphasis on systems design to achieve the maximum efficiency from interaction of the programs and utilities necessary to the operation and maintenance of a complete system, such as, accounts receivable, payroll, or inventory. Student must write, compile, test, and document all programs necessary to the proper function of one of these systems, including exception reports.

Prerequisite: EDP 213A or consent of the instructor.

**Electronic Data Processing 223B — Systems and Procedures II (3-0)**

A continuation of EDP 213B, covering specialized techniques allied with integrated data processing, total systems concepts, and computer applications to accounting systems.

Prerequisite: EDP 213B or consent of the instructor.

**Electronic Data Processing 223C — Computer Language I (3-3)**

Structure, rules and techniques of Basic Fortran Language.

## Engineering

The Engineering program in Tyler Junior College is designed to meet the needs of the first two years of a four or five year engineering degree program.

Colleges and universities no longer allow college algebra and college trigonometry to apply toward a degree in engineering. In order for a student to follow a four year program for a degree in these fields, it is desirable that the student take analytic geometry (Mathematics 123A) and Calculus I (Mathematics 213) the first semester of the freshman year.

It is recommended that all engineering majors, except those with an unusually strong background in high school mathematics, take college algebra (Mathematics 113A) and plane trigonometry (Mathematics 113B) during the summer prior to the first semester of the freshman year. This should be done to provide an adequate background for analytic geometry and calculus.

A grade of C or better must be earned in order to continue in sequential mathematics courses.



**PLAN I****(Engineering Majors)****1st Semester**

Mathematics 123A  
Mathematics 213  
Engineering 112  
Chemistry 114  
English 113  
Physical Education  
Psychology 111

**2nd Semester**

Mathematics 223A  
Engineering 213  
\*Engineering 122  
Chemistry 124  
English 123  
Physical Education

**3rd Semester**

Mathematics 223B  
History 213  
Government 213  
Physics 224A  
English 213  
Physical Education

**4th Semester**

Mathematics 223  
History 223  
Government 223  
Physics 214A  
Engineering 223A  
Physical Education

**PLAN II****(Engineering Majors)****1st Semester**

Mathematics 113A  
Mathematics 113B  
Engineering 112  
Chemistry 114  
English 113  
Physical Education  
Psychology 111

**2nd Semester**

Mathematics 123A  
Mathematics 213  
\*Engineering 122  
Engineering 213  
Chemistry 124  
English 123  
Physical Education

**3rd Semester**

Mathematics 223A  
Physics 224A  
History 213  
Government 213  
English 213  
Physical Education

**4th Semester**

Mathematics 223  
History 223  
Government 223  
Physics 214A  
Engineering 223A  
Physical Education

NOTE—Although Mathematics 123C — Introduction to Computer Science — is not shown in the plans above, all engineering majors should work this course into their two-year programs if possible.

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\* Contingent on requirements of your senior institution.

## Engineering

**Engineering 112 — Engineering Drawing (2-2-2)** Lettering, free-hand and instrument drawings, shape and size description, pictorial drawings, charts and graphs, line value and lettering to be stressed throughout the course.

Two lectures, two hours of supervised drafting, and two hours of home work per week.

**Engineering 122 — Descriptive Geometry (2-2-2)** Auxiliary and oblique views, point, line and plane problems. Development, intersection, highway, geology, and mining problems with emphasis on line value and proper lettering throughout the course.

Two lectures, two hours of supervised problems, and two hours of home work per week.

Prerequisite: Engineering Drawing and Solid Geometry or Trigonometry.

**Engineering 213 — Engineering Mechanics (3-0)** Newton's laws, work-energy and impulse-momentum principles for particles; force resultants, introductory rigid body statics.

Prerequisite: Credit or registration for Mathematics 223A.

**Engineering 223A — Engineering Mechanics (3-0)** Newton's laws, work-energy, impulse-momentum principles for rigid bodies static and dynamic friction.

Prerequisite: Engineering 213 and Mathematics 223A.

**Engineering 223B — Strength of Materials (3-0)** Analysis of stress and strain; riveted and welded joints; flexure and deflection of beams, shafts, columns; physical properties of materials.

Prerequisite: Engineering 213 and Mathematics 223A.

## English

**English 111 — Developmental Reading (1-1)** This course emphasizes the development of basic comprehension skills in reading. It is designed for students who desire increased reading skills. Training is given in overcoming the weaknesses of individual students and in increasing the speed of reading.

**English 113D — Developmental Reading (2-2)** This course emphasizes the development of basic comprehension skills in reading. It is designed for students who desire increased reading skills. Training is given in overcoming the weaknesses of individual students and in increasing the speed of reading.



**English 113E — Developmental English (3-0)** A course for the improvement of written and oral communication with emphasis on the fundamentals of grammar, sentence structure, and paragraph construction. Comparison and analysis of similar elements in different works of literature.

**English 113 — Composition and Rhetoric (3-0)** The development of the student's ability to think for himself and to express his thoughts in correct, clear language. Directed study of rhetorical principles through reading types of composition.

**English 123 — Composition and Rhetoric (3-0)** Further training in thinking and the ordering of thoughts by the study of literature. Directed study in techniques of writing a research paper.

Prerequisite: English 113.

**English 213 — World Literature (3-0)** A study of the masterpieces of Western world literature, from Homer through the Renaissance. Advanced composition.

Prerequisite: English 123.

**English 213A — Survey of Short Fiction (3-0)** A course of short fiction selections with emphasis on analytical compositions. Advanced composition and literature.

Prerequisite: English 123.

**English 223 — World Literature (3-0)** A study of the masterpieces of Western world literature, from the Neoclassic period to the twentieth century. Advanced composition, including a formal research paper.

Prerequisite: English 123.

**English 223B — Technical Report Writing (3-0)** Techniques of verbal efficiency in the various media of engineering and scientific communications, with stress on report and research-report preparation, letters and resumes. Required in technological and engineering plans.

Prerequisite: English 113.

**English 213N — Great Books (3-0)** Greek plays, Roman lives (from Plutarch), Dante's *Inferno*, Shakespeare's *King Lear*, a Russian novel, twenty English poems, a modern novel.

## Farm and Ranch Management

### **Ranch Management 113 — Principles of Soil Management (3-6)**

A general study of methods and problems in pasture management, care of pastures and meadows, silage and hay production. Types of soil, objectives in soil management and its relationship to natural and introduced grasses and legumes.

### **Ranch Management 113A — Principles of Animal Husbandry (3-6)**

A study of the problems connected with types and breeds, market classes and grades of farm animals. Basic phases of feeding, breeding and production are presented. Cooperating farm herds will be used for laboratory practices.

### **Ranch Management 113B — Principles of Agri-Business (3-0)**

Insights into Agriculture and Agri-Business related fields of employment for beginning students from the standpoint of professional and managerial careers in major dynamic and complex areas of Agriculture.

### **Ranch Management 123A — Agriculture Economics and Finance (3-0)**

An introduction to economic problems related to Agriculture at the farm and ranch as well as the national level. The field of Agriculture economics and its relationship to other sciences. Applications of borrowed capital to farm and ranch operations requirements for making a loan, methods of determining loan needs of farmers. Lending agencies and their policies in regard to farm loans, budgeting incomes to facilitate repayment of loans, and the cost of using borrowed capital.

### **Ranch Management 123B — Principles of Ranch Management (3-6)**

Farm and Ranch planning for the most efficient use of land, labor and capital in the production of crops and livestock. Attention is given to the problem of becoming established in farming, ranching and Agri-Business. Laboratory work is based on surveys and analyses of farm or ranch organization for the purpose of more profitable operation.

### **Ranch Management 123C — Principles of Horse Husbandry (3-6)**

Management of working and pleasure horses, breeding and care of mares, stallions and young stock, mating systems, feeding, health, maintenance and sales practices. Beginning equitation. Laboratory work involves judging, care and grooming, tack and equipment use.

### **Ranch Management 116S — Ranch Training On-The-Job (3-37)**

Students will be required to work on a ranch or in an agri-



business related form in the local area, during six-weeks of the summer months, on a co-op basis between the college and employer. Students will attend classes three hours a week to discuss problems, new ideas, and innovations that have occurred during the regular working day. The on-the-job training program will be supervised by the instructor as well as their immediate supervisor at each place of employment.

**Ranch Management 213 — Principles of Agriculture Sales (3-0)**

Basic principles of personal salesmanship are covered, with a study of methods, problems and duties of a salesman. The sale of feed, fertilizer, machinery and agriculture related products will be covered.

**Ranch Management 213A — Livestock Rations and Application (3-6)**

A basic course in the study of feed materials, their relative values and adaptability for various types of livestock, including nutrient requirements, balancing and formulating rations, plus methods of feeding farm animals.

**Ranch Management 214 — Farm Shop (4-6)**

A practical application of basic knowledge and practice in farm machinery repair, maintenance, welding, metal work and general farm shop.

**Ranch Management 223 — Animal Health (3-6)**

The broad field of animal health will be treated under topics such as internal and external parasites, principal diseases of livestock, their importance, identification and control handling of diseased animals, working with the veterinarian, and preventive livestock medicine. Students will study basic anatomy and physiology of farm animals.

**Ranch Management 223A — Farm and Ranch Records (3-0)**

A fundamental study of the principles of farm bookkeeping, such as farm inventory, the farm/ranch budget, the process of accounting, the analysis and interpretation of farm records. A complete set of farm and ranch accounts will be developed by each student.

**Ranch Management 223B — Principles of Beef Cattle Production (3-6)**

A general practice of beef production relating mainly to farm and ranch marketing problems of the East Texas area including the various beefcattle systems, handling, fitting, showing and breed associations. Participating ranches will serve as laboratories.

**Ranch Management 223C — Principles of Agricultural Marketing (3-3)**

A course designed to give basic knowledge of market grades of cattle, market trends, types of markets, cattle futures

market, and certain buying and selling techniques for various classes of livestock.

**Ranch Management 223D — Principles of Livestock Reproduction**

**(3-6)** An approach to reproductive processes in farm animals. Study includes hormones, estros cycles, ovulation, gestation, pregnancy testing, sperm physiology, collection and storage of semen, causes of sterilization in females and males.

## Fire Protection Technology

**Fire Protection 113 — Fundamentals of Fire Protection (3-0)**

History and Philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organizations; a discussion of current related problems and review of expanding future fire protection problems.

**Fire Protection 113A — Industrial Fire Protection I (3-0)**

Specific concerns and safeguards related to business and industrial organizations. A study of industrial fire brigade organization and development, plant lay-out, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organization. Study of elementary industrial fire hazards in manufacturing plants.

**Fire Protection 113B — Fire Safety Education (3-0)**

A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examination and study of the physical and psychological variables related to occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

**Fire Protection 113C — Advanced Fire Loss Statistical Systems**

**(3-0)** An in-depth study of computerized systems that may be utilized for storing and retrieval of fire loss statistics, also techniques and procedures for programming various types of records and reports valuable to the fire service. Exploration of the new systems of micro-filming including the modern technology of COM (Computer Output Microfilm) and the systems utilizing microfiche, including reduction ratios and various type readers. A review of standards for the uniform coding for fire protection as developed by the NFPA in pamphlet 901 and 901AM.



**Fire Protection 113D — Fire Insurance Fundamentals (3-0)** The relationships between fire defenses, fire losses, and insurance rates are studied. Basic Insurance principles, fire loss experience, loss ratios, state regulations of fire insurance, key rate system, applying the I.S.O. grading schedule and other topics are stressed. Relationship of insurance to modern business principles of property and casualty insurance contracts; corporate structure of insurance companies.

**Fire Protection 113E — Legal Aspects of Fire Protection (3-0)** A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out their duties. Introduction and basic concepts of Civil and Criminal law, the Texas and Federal judicial structure, and cities liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning fire fighters, fire departments, and municipalities.

**Fire Protection 113F — Fire Service Communications (3-0)** The development of fire alarm systems, the various types of systems, installation, operation and testing of the most common systems; receiving, dispatching, and radio communication procedures; F.C.C. regulations, the fire alarm operations office, mutual aid systems, fire station communications and facilities, response and fire ground procedures, emergency operations, code and numbering systems, required records and reports; technological advances.

**Fire Protection 113G — Urban Fire Problem Analysis (3-0)** Intensive study of the urban fire problem. Problems covered by lack of zoning and other land use laws. Operation research techniques, and systems engineering are utilized as analytic procedures for the technological assessment of the public fire protection, including water supply, fire alarm, and fire department traditional assessment methods and urban analysis. Socio-economic and management factors as related to city planning. Environment problems incurred should be studied in-depth.

**Fire Protection 123 — Fire Protection Systems (3-0)** Study of the required standard for water supply; special hazards protection systems; automatic sprinklers and special extinguishing systems; automatic signaling and detection systems; rating organizations and underwriting agencies.

**Fire Protection 123A — Fire Prevention (3-0)** The objectives and views of inspections, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire

Prevention organization; public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards.

**Fire Protection 123B — Industrial Fire Protection II (3-0)** Development of fire and safety organizations in industry; relation between private and public fire protection organizations; current trends, deficiencies and possible solutions for industrial fire problems; role of insurance and other special organizations; an in-depth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques, equipment and innovations.

**Fire Protection 213 — Fire Administration I (3-0)** An in-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire Service Leadership as viewed from the Company officer's position.

**Fire Protection 213A — Building Codes and Construction (3-0)** Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns; review of related statutory and suggested guidelines, both local and national in scope. Review of Model Building Codes and Life Safety Code.

**Fire Protection 213B — Fire and Arson Investigation (3-0)** A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics.

**Fire Protection 223C — Hazardous Materials II (3-0)** Hazardous materials covering storage, handling, laws, standards, and fire fighting techniques associated with chemicals, gases, flammable



liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radio-active materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radio-active materials and operational procedures.

**Fire Protection 223A — Fire Administration II (3-0)** Study to include insurance rates and ratings, preparation of budgets, administration and organization of training in the fire department; city water requirements, fire alarm and communications systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

**Fire Protection 224B — Fire Fighting Tactics and Strategy (3-1)** Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis to be placed on pre-planning, study of conflagration problems, fire ground organization problem solving related to fire ground decision making and attack tactics and strategy. Use of Mutual Aid and large scale command problems.

**Fire Protection 223 — Hazardous Materials I (3-0)** Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids, and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting and control.

## Foreign Language

**French 113-123 — Conversational French (3-0)** For students who have never studied French. Conversational approach including fundamentals of grammar, readings, and emphasis on oral and written composition.

**French 113A — Readings in French (3-0)** Standard elementary grammar with oral and reading exercises. A course to prepare students to read and translate material relating to various sciences.

**French 123A — Readings in French (3-0)** Translation of material leading to various sciences. Designed to develop technical vocabulary and facilitate in reading scientific material.

**French 114 — Beginner's French (3-2)** Drill in the pronunciation and the grammar of the French language with written exercises, dictation and conversation in French.

**French 124 — Composition and Reading (3-2)**

Prerequisite: French 114 or two admission units in French from high school.

**French 213-223 — Oral Expression, Reading & Composition (3-0)** Outside readings assigned from French masters.

Prerequisite: French 124 or three or four admission units in French from high school.

**Spanish 113-123 — Conversational Spanish (3-0)** For students who have never studied Spanish. Conversational approach including fundamentals of grammar, readings, and emphasis on oral and written composition.

**Spanish 113A — Readings in Spanish (3-0)** Standard elementary grammar with oral and reading exercises. A course to prepare students to read and translate material relating to various sciences.

**Spanish 123A — Readings in Spanish (3-0)** Translation of material leading to various sciences. Designed to develop technical vocabulary and facilitate in reading scientific material.

**Spanish 114 — Beginner's Spanish (3-2)** Drill in the pronunciation and the grammar of the Spanish language with written exercises, dictation and conversation in Spanish.

**Spanish 124 — Composition and Reading (3-2)**

Prerequisite: Spanish 114 or two admission units in Spanish from high school.

**Spanish 213-223 — Oral Expression, Reading & Composition (3-0)** Outside readings assigned from Spanish masters.

Prerequisite: Spanish 124 or three or four admission units in Spanish.

**German 113-123 — Conversational German (3-0)** For students who have never studied German. Conversational approach including fundamentals of grammar, readings, and emphasis on oral and written composition.



**German 113A — Readings in German (3-0)** Standard elementary grammar with oral and reading exercises. Course to prepare students to read and translate material relating to various sciences.

**German 123A — Readings in German (3-0)** Translation of material leading to various sciences. Designed to develop technical vocabulary and facilitate in reading scientific material.

**German 114 — Beginner's German (3-2)** Drill in the pronunciation and the grammar of the German language with written exercises, dictation and conversation in German.

**German 124 — Composition and Reading (3-2)**

Prerequisite: German 114 or two admission units in German from high school.

**German 213-223 — Oral Expression, Reading and Composition (3-0)** Outside readings assigned from German masters.

Prerequisite: German 124 or three or four admission units in German.

## Government

**Government 213 — American Government (3-0)** A functional study of the American constitutional governmental system, of the origins, developments and present-day problems of the national government, of the rights, privileges and obligations of citizenship.

Prerequisite: Sophomore standing.

**Government 223 — American State Government (3-0)** The nature, organization, and general principles of local government in the United States, with special attention to these forms in Texas; the judicial, executive, and administrative functions in federal and state government; financing governmental activities.

Prerequisite: Sophomore standing.

## Graphic Communications

**Graphic Communications 113 — Basic Photography (2-4)** A course designed to cover the basic requirements of photography. Including use of camera, film development, and print making. Credit cannot be given for GC 113 and Journalism 123 P or Photography 123. Class fee: \$6.50.

**Graphic Communications 113A — Basic Graphics (2-4)** A course designed to acquaint the student with the fundamentals of orthographic drawing, pictorial drawing and rendering techniques.

**Graphic Communications 123 — Advanced Photography (2-4)** A continuation of Photography 113 with the main course objectives to include the study of representation, form, expression, esthetic values, and photo composition. A prerequisite of Photography 113 or a basic knowledge of photography. Class fee: \$6.50.

**Graphic Communications 123B — Reproduction Layout and Design (2-4)** A course designed to cover the basic principles of planning, design, layout, and other artwork procedures in preparation of the images used in photo-conversion for graphic arts.

**Graphic Communications 213 — Commercial Photography (2-4)** Organized specialized learning experiences which include theory, laboratory, and studio work as each relates to all phases of camera uses and photographic processing. Instruction includes composition and methods of photographing products for advertising display in all medias. Class fee: \$6.50.

**Graphic Communications 213A — Photographic Reproduction (2-4)** A course designed to present the basic methods of converting camera ready images to film negatives or positives. The processes, materials and tools of this special kind of photography are used in the preparation of image carriers.

**Graphic Communications 223 — Studio Photography (2-4)** Advanced use of lighting and composition of studio portraiture and photography. Class fee: \$6.50.

**Graphic Communications 223A — Graphic Reproduction (2-4)** A course that will describe and illustrate the procedures, materials, and equipment used in transferring images to paper. The purpose of graphic reproduction is to put an image on paper.

## History

**History 113 — A Survey of British History Through 1660 (3-0)** This course introduces the student to the successive developments in British history, institutions, and civilization. Lectures and reading assignments acquaint the student with the Anglo-Saxon legal system, the Norman Conquest, and Feudalism; the Medieval Church; the Development of Parliament; and emphasizes the emergence of Modern Great Britain and the Tudor and early Stuart periods.



**History 123 — A Survey of British History Since 1660 (3-0)** Commencing with the Stuart restoration, this acquaints the student, through lectures and reading assignments, with the development of British democratic philosophy; the emergence of Britain as a world power in the seventeenth century; the loss of the first Empire; the fight for survival against Napoleon; the growth of the second Empire; Britain's decline as an imperial power; and traces the development of the modern liberal British state.

**History 113A — Western Civilization in Medieval Times (3-0)** A standard western civilization - cultural development survey course in the cultural, political, and institutional development of the nations of Europe from antiquity to the renaissance.

**History 123A — Western Civilization in Modern Times (3-0)** Continuation of History 113A. A standard western civilization - cultural development survey course in the cultural, political, and institutional development of the nations of Europe from the renaissance to modern times.

**History 213 — History of the United States (3-0)** A general survey of the history of the United States from the era of discovery through the Civil War.

**History 223 — History of the United States (3-0)** A general survey of the history of the United States from Reconstruction to the present time.

**History 223A — The Civil War and Reconstruction (3-0)** The causes, course, and results of this sectional struggle in the United States. Formation of the Confederacy, military campaigns, and Reconstruction.

**History 223T — Texas History (3-0)** A history of Texas from the Spanish period to the present day. Stress is placed upon the period of Anglo-American settlement, the revolution, the republic, and the development of the modern state.

## Home Economics

**Home Economics 113A — Principles of Food Selection and Preparation (2-4)** Fundamental principles in the selection and preparation of foods; nutritive values; cost of foods.

**Home Economics 123A — Meal Management (2-4)** For majors in Home Economics, hotel or restaurant management. Planning, managing, and serving meals suitable for family groups for all occasions. Selection and use of table appointments.

**Home Economics 113B — Costume Design and Selection (2-4)**

Fundamental principles of design and color applied to the selection and planning of appropriate dress. Emphasis on line, color, and texture in relation to the individual, with laboratory application.

**Home Economics 113C — Textiles (3-2)** The study of fibers, fabrics, and finishes for application in choices of fabrics for clothing and home furnishings.

**Home Economics 123B — Clothing (2-4)** Fundamental principles of selection and construction of clothing. Use and alteration of commercial patterns. Problems selected according to the ability and learning experience of the student.

**Home Economics 123C — Nutrition (2-2)** Fundamental principles of human nutrition applied to the individual, family, and community nutrition problems. Chemistry, physiology and economics of nutrition.

**Home Economics 124 — Home Furnishings and Interior Design (3-2)** Designed to give the student a background of what to look for and plan for in the home. Also to acquaint the student with the basic needs in home furnishings and with solutions to problems of interior decoration.

## Journalism

**Journalism 113 — Mass Communication (3-2)** An introduction to mass communication and the fundamentals of reporting for the Mass Media. Laboratory in writing for newspaper, radio, television one hour per week.

**Journalism 123 — Introduction to Advertising (3-0)** The course analyzes the social and economic benefits of advertising as a medium of communication in print and electronic journalism.

**Journalism 123E — Radio-Television News (3-2)** Preparation of news and specialized news program copy for radio and television presentation. News styles for the electronic media. Spot news, interpretative specials, and analysis.

**Journalism 123P — Photojournalism (2-3)** A beginning course in photography teaching reporting with the camera. Basic instruction in black and white press photography with emphasis on 120 and 35 mm cameras. Photographic picture composition, developing, and printing. Credit cannot be given for J 123P and Photography 123 or Technical Illustration 113.

Prerequisite: Journalism 113. Laboratory fee \$6.50.



**Journalism 213 — General Reporting (3-2)** Theory and practice in news writing for newspaper, radio, television. Laboratory two hours per week.

**Journalism 223 — Editing (3-2)** Editing copy for accuracy, objectivity, and readability.

Prerequisite: Journalism 113 or 213.



## Law Enforcement Technology

### **Law Enforcement 113 — Introduction to Law Enforcement (3-0)**

The philosophy and history of law enforcement is studied. It includes a survey of police problems and crimes. Organization and jurisdiction of local, state and federal enforcement agencies and a survey of professional qualifications and opportunities.

**Law Enforcement 113B — Police Organization and Administration (3-0)** The principles of organization, administration and functioning of police departments are studied. This includes personnel policies, operating division policies and command of the department as a whole.

**Law Enforcement 123B — Police Role in Crime and Delinquency (3-0)** Juvenile criminal behavior will be studied to provide an insight into casual factors, precipitating forces, and opportunities for the commission of criminal or delinquent acts. The techniques, responsibilities, and capabilities of police organization in the area of delinquency prevention will be developed.

**Law Enforcement 123C — Patrol Administration (3-0)** To acquire a basic philosophy and history of systems dealing with patrol functions, to study the principles of organization and function of the patrol operation so that the students may have an overview of the role of the patrol function in today's society.

**Law Enforcement 213A — Criminal Investigation (3-0)** Theories and concepts of the investigator's role in modern criminal investigation are studied. Basic skills necessary in conducting an investigation, developing sources of information, the collection and preservation of evidence and preparation of reports are developed.

**Law Enforcement 213B — Legal Aspects of Law Enforcement (3-0)** This course covers a brief history and philosophy of modern law which includes the structures, definition and application of commonly used Penal Statutes and leading case laws. It also includes a review of the elements of crimes, laws and arrest, search and seizure.

**Law Enforcement 213D — Probation and Parole (3-0)** This course is designed as an introduction to the many faceted subject of criminal corrections. Through this survey course the student will be exposed to the historical development of this integral part of today's Criminal Justice System.



**Law Enforcement 223B — Traffic Planning and Administration**

**(3-0)** This course is designed to provide the student with an understanding of the magnitude and complexities of the traffic problem. On successful completion he will have a working knowledge of the methods and techniques used by the various agencies to eliminate or to control these problems. This course will enable the student to evaluate any program with which he may come in contact and will also put him in a position to offer constructive criticism and remedies.

**Law Enforcement 223C — Criminal Procedure and Evidence (3-0)**

Introduction to the rules governing the admissibility of evidence and types of evidence; criminal procedure in various courts, review of the Texas Code of Criminal Procedure, including laws of arrest, search and seizure, and leading case laws on each topic.

**Law Enforcement 223D — Police Community Relations (3-0)**

The role of the individual officer in achieving and maintaining positive public response; inter-group relations and public information.

## Licensed Vocational Nursing

**Licensed Vocational Nursing 111 — Personal and Vocational**

**Adjustments I** Introduction to nursing, nursing ethics, legal aspects, personal hygiene, licensure nursing associations and publications. (10 clock hours)

**Licensed Vocational Nursing 111A — Nutrition**

Basic normal nutrition and nutrients required for maintaining health. Introduction to basic hospital diets. (Specific diet therapy to be incorporated in related subjects and in patient care.) (24 clock hours)

**Licensed Vocational Nursing 111B — Mental Health & Mental**

**Illness** Basic principles of positive mental health and of psychiatric nursing. (24 clock hours)

**Licensed Vocational Nursing 112 — Clinical Experience I**

This area of training consists of actual nursing experience gained through the assignment of duty periods, on a rotation basis, in each nursing area of the hospital. Supervised by the regular LVN instructor, the student is familiarized with the nursing responsibilities and requirements to be expected on accepting employment as a Licensed Vocational Nurse. (128 clock hours)

**Licensed Vocational Nursing 113 — Anatomy** Basic Anatomy and physiology as a background for nursing skills and other subjects. (48 clock hours)

**Licensed Vocational Nursing 113A — Pharmacology** Weight systems, calculation of dosages, introduction to basic classification of drugs. Principles and techniques of drug administration, excluding infusions. (Specific drug therapy to be incorporated in medical-surgical, maternity and newborn and pediatric nursing.) (48 clock hours)

**Licensed Vocational Nursing 113B — Maternity and Newborn Nursing** Normal obstetrics, pregnancy through labor and delivery to postpartum inclusive of complications specific to obstetrics and disease conditions affecting the course of obstetrics. Supportive care to include physical, emotional, and spiritual needs. Effects of drugs and diet on mother and child during prenatal and postpartum.

Immediate care of newborn, characteristics of newborn, complications of newborn related to pregnancy, labor and delivery. Nursing care of congenital abnormalities and birth injuries. (48 clock hours)

**Licensed Vocational Nursing 113C — Disease Control & Prevention, Vocational Skills** Basic microbiology for understanding the importance of maintaining cleanliness and disinfection in relation to prevention of disease, disease control and community health and resources.

Basic nursing concepts, nursing techniques. This area of training consists of actual nursing experience gained through supervised assignments in each nursing area in the hospital. (176 clock hours)

**Licensed Vocational Nursing 122 — Pediatric Nursing, Normal Growth & Development** Nursing of children with childhood diseases and diseases specific to children. Effects of disease on growth and development. Nursing care inclusive of supportive measures in meeting physical and emotional needs. Calculation of pediatric dosages; incorporation of drug and diet therapy.

Growth and development from infancy through childhood, teens and reproductive years. (Deviations from normal and nursing care to be incorporated in related subjects.) (38 clock hours)

**Licensed Vocational Nursing 121 — Geriatrics & First Aid** Normal physical changes due to aging process. (Conditions and nursing care to be incorporated in medical-surgical nursing.)



Basic principles of emergency nursing measures. (22 clock hours)

**Licensed Vocational Nursing 126 — Medical-Surgical Nursing I**

Nursing of conditions of illness requiring medical or surgical treatment. Care of aged. Supportive care inclusive of physical, emotional, and spiritual needs. Incorporation of specific drug and diet therapy. Practice in the administration of medications. (114 clock hours)

**Licensed Vocational Nursing 124 — Clinical Experience II**

This area of training consists of actual nursing experience gained through the assignment of duty periods, on a rotation basis, in each nursing area of the hospital. Supervised by the regular RN/LVN instructor, the student is familiarized with the nursing responsibilities and requirements to be expected on accepting employment as a Licensed Vocational Nurse. (568 clock hours)

**Licensed Vocational Nursing 133 — Medical-Surgical & Personal-**

**Vocational Adjustments II** Nursing of conditions of illness requiring medical or surgical treatment. Care of aged. Supportive care inclusive of physical, emotional, and spiritual needs. Incorporation of specific drug and diet therapy. Practice in the administration of medications. Medical-Surgical I and Medical-Surgical II add up to seven months. (60 clock hours)

Basic nursing concepts, nursing techniques.

**Licensed Vocational Nursing 139 — Clinical Experience III**

This area of training consists of actual nursing experience gained through the assignment of duty periods, on a rotation basis, in each nursing area of the hospital. Supervised by the regular RN/LVN instructor, the student is familiarized with the nursing responsibilities and requirements to be expected on accepting employment as a Licensed Vocational Nurse. (480 clock hours)

## Mathematics

The Mathematics program in Tyler Junior College is designed to meet the varying needs, backgrounds, and abilities of its students. Mathematics courses are offered which meet the requirements of the technology division and liberal arts, business, science, and mathematics majors. A student should take the same courses during his two years at Tyler Junior College as he would take if enrolled as a freshman and sophomore in a senior institution.

It is recommended that all mathematics majors and all science majors who will take the Calculus sequence of courses, except those with an unusually strong background in high school mathematics, take college algebra ( Mathematics 113A) and Plane Trigonometry (Mathematics 113B) during the summer prior to the first semester of the freshman year. These courses will provide an adequate background for Analytic Geometry and Calculus which should be taken during the first semester of the freshman year.

In order to help students register for the appropriate mathematics courses, the following prerequisites have been established:

**For Analytic Geometry (Mathematics 123A):**

1. Credit in College Algebra (Mathematics 113A) and Plane Trigonometry (Mathematics 113B), or
2. Advanced placement in Mathematics 113A and Mathematics 113B with  $1\frac{1}{2}$  years of high school algebra, or its equivalent, and at least one semester of high school trigonometry.

**For Calculus I (Mathematics 213):**

1. Credit in Mathematics 123A, or
2. Concurrent registration in Mathematics 123A with grades of B or better in both Mathematics 113A and 113B, or
3. Advanced placement in Mathematics 113A and 113B with  $1\frac{1}{2}$  years of high school algebra, or its equivalent, one semester of high school trigonometry, and concurrent registration in Mathematics 123A.

The two plans which follow give tentative schedules of the courses which Mathematics majors should take during the two years here at Tyler Junior College. Plan I is the preferred plan but in all cases each student should see a counselor and/or faculty adviser in order that the degree plan may be carefully correlated with the requirements of the senior college to which the individual student will transfer.



**PLAN I**  
**(Mathematics Majors)**

**1st Semester**

Mathematics 123A  
Mathematics 213  
English 113  
History 213  
\*Foreign Language 114  
Physical Education

**2nd Semester**

Mathematics 223A  
Mathematics 123C  
English 123  
History 223  
Physics 124A  
\*Foreign Language 124  
Physical Education

**3rd Semester**

Mathematics 223B  
English 213  
Government 213  
\*Physics 224A  
\*Foreign Language 213  
Physical Education

**4th Semester**

Mathematics 223  
English 223  
Government 223  
\*Physics 214A  
\*Foreign Language 223  
Physical Education

**PLAN II**  
**(Mathematics Majors)**

**1st Semester**

Mathematics 113A  
Mathematics 113B  
English 113  
History 213  
\*Foreign Language 114  
Physical Education

**2nd Semester**

Mathematics 123A  
Mathematics 213  
English 123  
Physics 124A  
\*Foreign Language 124  
Physical Education

**3rd Semester**

Mathematics 223A  
Mathematics 123C  
English 213  
Government 213  
\*Physics 224A  
\*Foreign Language 213  
Physical Education

**4th Semester**

Mathematics 223 or  
Mathematics 223B  
History 223  
Government 223  
\*Physics 214A  
\*Foreign Language 223  
Physical Education

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\* See the catalog of the senior college to which you will transfer.

## **\*\* Mathematics**

**Mathematics 113E — Applied Mathematics I (3-0)** Signed numbers; fractions; percentage, slide rule, and basic Algebra. For students in technological programs.

**Mathematics 123E — Applied Mathematics II (3-0)** Ratio and proportion, logarithms, intermediate Algebra, solution of triangles by use of trigonometry, and vectors. For students in technological programs.

**Mathematics 113T — Applied Trigonometry (3-0)** This course presents the concepts of trigonometry such as angular measure, function of the angles, solutions of triangles and equations. A course for students in technological programs.

**Mathematics 113L — Fundamentals of Mathematics (3-0)** Designed for students who need a review of fundamental operations in mathematics but who do not intend to take sophomore level or higher mathematics. This course may not be used as a part of the requirements for a major in mathematics. Review of basic arithmetic and algebra with an introduction to trigonometry and logarithms.

**Mathematics 113 — College Algebra (3-0)** A first course in the logical approach to algebra, primarily for liberal arts and business administration majors. This course includes: sets; number system; solution and graphing of first degree equations and inequalities; solution of systems of linear equations and inequalities; polynomials and factoring; quadratic equations and inequalities; relations and functions; exponents; radicals.

Prerequisite: One year of high school algebra and acceptable ACTP mathematics score or Mathematics 113L.

**Mathematics 113K — Finite Mathematics I (3-0)** A beginning course in topics from finite mathematics, with business applications. This course includes: logic; sets; relations and functions; linear equalities and inequalities; vectors and matrices; linear models; counting - permutations and combinations; and probability.

Prerequisite: Acceptable ACTP mathematics score or Mathematics 113.

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\* See the catalog of the senior college to which you will transfer.

\*\* A grade of C or better must be made to continue in Mathematics.



**Mathematics 123K — Finite Mathematics II (3-0)** Topics in continuous mathematics, with business applications. This course includes: quadratic, exponential, and logarithmic graphs; sequences, limits, and summation; topics from analytic geometry; topics from calculus; continuity, maxima and minima, and fundamental derivative and integral formulas.

Prerequisite: Mathematics 113K.

**Mathematics 223S — Programming for Statistics (3-0)** Instruction in programming the computer for solving various problems encountered in business (Fortran). Univariate analysis, measures of central tendency and scatter; index numbers; and analysis of time series. Materials fee, \$2.00.

Prerequisite: Six hours of College Mathematics.

**Mathematics 113G — Introduction to Modern Mathematics I (3-0)** Sets, counting numbers, integers, topics from elementary number theory, rational numbers, decimals and the real number system, systems of numeration.

Prerequisite: Math section ACT score 13 or greater.

**Mathematics 123G — Introduction to Modern Mathematics II (3-0)** Field of real numbers, linear equations and inequalities, functions and graphs, systems of linear equations, quadratic equations, complex and finite number systems, topics from geometry.

Prerequisite: Mathematics 113G.

**Mathematics 113A — College Algebra (3-0)** Designed primarily for engineering and mathematics majors, this course includes: sets; number system; exponents; relation and function; inverse functions; exponential and logarithmic functions; quadratic functions; polynomials and elementary theory of equations; systems of equations; inequalities; mathematical induction; progressions; binomial theorem.

Prerequisite: One and one-half years of high school algebra or equivalent.

**Mathematics 113B — Trigonometry (3-0)** Angular measure; functions of angles; derivation of formulas; identities; solution of triangles; equations; inverse functions; complex numbers.

Prerequisite: Mathematics 113 or registration in Mathematics 113A.

**Mathematics 123A — Analytic Geometry (3-0)** Cartesian coordinates; the straight line; the circle, and conic sections; transformation of coordinates; polar coordinates; parametric equations; transcendental and higher plane curves.

Prerequisite: Mathematics 113A, 113B, consent of Mathematics department, or see introductory paragraph, Pages 116-117.

**Mathematics 123C — Introduction to Computer Science (2-2)**

Fundamental concepts of information theory, computer programming with flow charting and coding, utilization of BASIC language first half of course and FORTRAN language last half. Students will develop programs dealing with problems from their particular field such as engineering, mathematics, physics, business accounting, chemistry using a Data General Corp. NOVA 1200 mini-computer and an IBM 360 series/model 44 computer.

Prerequisite: Math section ACT score 25 or greater or consent of department.

**Mathematics 213 — Calculus I (3-1)** Variables, functions and limits; differentiation of algebraic functions, with applications; differentials; mean value theorem; integration of algebraic functions, with applications, differentiation of transcendental functions with applications.

Prerequisite: Mathematics 123A, or see introductory paragraph, Page 117.

**Mathematics 223A — Calculus II (3-1)** Methods of integration, with applications; improper integrals; indeterminate forms; vectors and curvilinear motion.

Prerequisite: Mathematics 213.

**Mathematics 223B — Calculus III (3-1)** Introduction to series, expansion of functions, hyperbolic functions, analytic geometry of three dimensional space, partial differentiation, multiple integration with applications.

Prerequisite: Mathematics 223A.

**Mathematics 223 — Differential Equations (3-1)** Equations of the first order and degree; linear differential equations; operational methods; special types of higher order equations; Laplace transforms; applications of differential equations.

Prerequisite: Mathematics 223A.



## Medical Laboratory Technology

**Medical 113 — Basic for Allied Health Service (3-9)** An introduction to the field of Medical Laboratory Technology and a study of hematology and urinalysis.

**Medical 113S — Clinical Practice I (0-24)** This course is designed to provide clinical laboratory experience in the area of specialization. Students will be under the supervision of a program coordinator.

**Medical 123 — Clinical Microbiology (3-9)** Practical and basic applications of methods and equipment used in clinical microbiology. Brief history of methods to furnish a basic background and terminology. A number of orientation sessions at the hospital laboratory bacteriology departments are included.

**Medical 123S — Clinical Practice II (0-24)** A continuation of Medical 113S.

**Medical 213 — Clinical Practice (0-12)** This course is designed to provide practical clinical laboratory experience in the area of specialization. Students will be under the general supervision of a program coordinator.

**Medical 213C — Clinical Chemistry (2-3)** Topics and applications in chemistry related to the clinical laboratory.

**Medical 213A — Medical Laboratory Techniques I (2-3)** A study of topics related to clinical serology with laboratory applications to various serological procedures.

**Medical 213S — Clinical Practice I (0-24)** This course is designed to provide clinical laboratory experience in the area of specialization. Students will be under the supervision of a program coordinator.

**Medical 223 — Clinical Practice (MLT) (0-12)** This course is designed to provide clinical laboratory experience in the area of specialization. Students will be under the supervision of a program coordinator.

**Medical 223A — Medical Laboratory Techniques II (2-10)** A study of principles in blood banking and coagulation techniques with laboratory application of the various procedures used in a clinical laboratory.

**Medical 223S — Clinical Practice II (0-24)** This course is designed to provide clinical laboratory experience in the area of specialization. Students will be under the supervision of a program coordinator.

## Medical Record Technology

**Medical Record 113 — Medical Terminology I (3-0)** An introduction to the principles of medical terminology, and the classes of word elements as building blocks for a medical vocabulary. Medical terminology relating to specific systems of the body with emphasis on material found in medical records.

**Medical Record 113A — Medical Record Science (2-2)** Introduction to the history of medicine, the hospital, and the medical record. Discussion of the organization of the modern hospital with emphasis on the medical record and the medical record profession. Laboratory includes introduction to a simulated medical record department, its organization and function.

**Medical Record 123 — Medical Terminology II (3-0)** Continuation of MR 113.

Prerequisite: MR 113.

**Medical Record 123A — Human Relations and Personnel Problems (3-0-0)** Human relations and personnel problems as experienced in job and wage relations and in selection, training and supervision of employees.

**Medical Record 123B — Medical Record Science (2-2)** Orientation to various methods of filing, discussing of the methods used for compiling statistics, introduction to classification systems and methods of coding and indexing with special instruction in SNODO and ICDA. Laboratory includes working with filing systems and medical records, coding and indexing by SNODO and ICDA, working with statistical formulas related to medical records.

Prerequisite: MR 113A.

**Medical Record 123C — Directed Practice (0-8)** Practical experience, under the guidance of a Medical Records Librarian, in the medical records room of a local hospital. The student will have an opportunity to utilize the knowledge and skills obtained in the classroom, and to gain a greater knowledge of the medical records field.

Prerequisite: MR 113A.

**Medical Record 213 — Directed Practice (0-12)** Continuation of MR 123C.

Prerequisite: MR 123B.

**Medical Record 213A — Medical Machine Transcription (2-2)** Designed to develop the medical transcription skills required in a medical records room, and to expand knowledge of medical



terminology. Organized and presented on the basis of systems of the body. Transcription will consist of X-ray reports, medical reports, and increasingly complex operative reports, including instruments used.

Prerequisite: MR 113, 123.

**Medical Record 213B — Legal Aspects of Medical Records (2-2)**

Introduction to various indexes and registers, medical ethics, and legal aspects of medical records. Special attention is given to authorizations, release of information, and the handling of medical records in court; organization of the medical staff and medical staff committees; and requirements of the accrediting agencies.

Prerequisite: MR 113, 113A.

**Medical Record 224 — Directed Practice (0-16)** Continuation of MR 213.

Prerequisite: MR 213B.

**Medical Record 223 — Seminar (2-0)** Introduction to additional medical record responsibilities which vary with type of local health organization. Such specialized areas as out-patient clinics, extended care facilities, and nursing homes are included. Will also serve as a forum for senior year directed practice problems.

Prerequisite: MR 113, 113A, 213B.

## Mid-Management

**Mid-Management 113B — Principles of Management (3-0)** This course combines the traditional concepts of management with the newer systems concept in an endeavor to develop a systems approach to management. The process of managing by planning, organizing, directing, coordinating and controlling is a integral part of this approach. The relationship of the principles of management to business situations using case studies is basic in this course.

**Mid-Management 113C — Human Relations in Management (3-0)**

The basic understanding of the individual alone and as a part of groups is critical to the businessman. Included are introduction and definition, the role of the manager and such topics as leadership, motivation, communication, group dynamics, and human relations and job performance.

**Mid-Management 113D — Principles of Supermarket Retailing (3-0)** A study is made of the planning and supervision involved

in marketing merchandise or service which will best serve to realize the marketing objectives of business. Included is the organization and operation of the retail store and an analysis of retail buying and merchandising procedures covering buying, receiving, pricing, credit and collections, sales promotion, display, inventory and control.

**Mid-Management 123 — Principles of Marketing (3-0)** A general analysis made of the social and economic aspects of distribution as found in business organizations. Included is a study of the marketing structure and functions, institutional problems, prices, advertising and products.

**Mid-Management 123D — Principles of Supermarket Merchandising (3-0)** This course is designed to acquaint the student with the various merchandising techniques peculiar to a supermarket. Emphasis is placed on the functions of buying, promotion, display, turnover and pricing for profit.

**Mid-Management 213 — Advertising and Sales Promotion (3-0)** The fundamental principles, practices and common media in modern advertising are introduced. Included are those activities that supplement both advertising and personal selling, such as sampling, displays, demonstrations and other kinds of effort that render them effective.

**Mid-Management 213B — Personnel Management (3-0)** This course includes the study of personnel policies and administration, education and training, job classification and analysis, labor supply, employment and testing. Hours of work, labor union relations and employee safety and health problems.

**Mid-Management 213C — Introduction to Supermarket Management (3-0)** This course is designed to acquaint the student with the various merchandising techniques peculiar to a supermarket. Emphasis is placed on the functions of buying, promotion, display, turnover, and pricing for profit.

**Mid-Management 223 — Salesmanship (3-0)** The basic principles of personal salesmanship are covered, with a study of methods, problems and duties of a salesman.

**Mid-Management 223B — Introduction to Public Relations (3-0)** The course introduces the techniques of public relations applied to supervisory and management positions. Customer relations are emphasized. Attention is given to programming a total public relations effort and selecting the strategy, media and persuasive devices which will accomplish given objectives.



**Mid-Management 223C — Principles of Supermarket Operations**

**(3-0)** This course presents the principles and methods used in the operation of a supermarket with regard to organization, planning and control. Resource personnel from the supermarket industry will augment the scope of the classroom instructional program.

**Mid-Management 113A — 123A — 213A — 223A — Mid-Management Work Experience & Seminar (1-20)**

Internship is open only to students enrolled in the Mid-Management Program. This provides actual work experience in the retail, wholesale, or service business field as a paid employee. The student, the employer and the program coordinator develop an individual program for each student. The student is evaluated by both the employer and the program coordinator.

A weekly one hour seminar is held in conjunction with his job.

Three semester hours credit each semester for four semesters.

The student can only take one internship per semester.

## Music

Courses are offered for three types of students:

1. Those who desire to pursue a professional career in music after completing a standard four-year music curriculum.
2. Those who desire to take individual private lessons in applied music.
3. Those who desire a cultural background in music.

### College Credit in Music

Students who receive college credit are required to meet all admission requirements as listed on pages 24-26. Music majors, who have had no previous training in piano, are required, in addition, to pass a proficiency examination in piano.

Students who desire to take non-credit private lessons are not required to meet regular admission requirements.

The amount of credit is dependent upon the amount of laboratory hours per week decided upon at registration as follows:

1. **Preparatory work** in Applied Music is offered for beginning students and for students not sufficiently advanced to meet requirements for music major courses. College level students enrolling in preparatory courses may receive credit as follows:

- (1) One hour credit; one half-hour lesson, 6 hours practice weekly.
- (2) Two hours credit; two half-hour lessons, 10 hours practice weekly.

**2. Credit in Strings, Woodwinds, Piano and Brasses.**

One semester hour credit requires six hours laboratory per week.

Two semester hours credit requires ten hours laboratory per week.

Three semester hours credit requires thirteen hours laboratory per week.

Four semester hours credit requires sixteen hours laboratory per week.

**3. Credit in Voice.**

One semester hour credit requires six hours of laboratory per week.

Two semester hours credit requires nine hours of laboratory per week.

Three semester hours credit requires twelve hours of laboratory per week.

**Piano**

**Music 112PP, 122PP, 212PP, 222PP — Preparatory Piano.** Elements of piano-forte playing; instruction material and exercises according to individual needs; from simple forms of scales and arpeggios; selected compositions from Bach, Beethoven, Clementi, Handel, Haydn, Kuhlau, Mozart, Schumann and others.

Admission by examination.

**Music 114P, 124P — Freshman Piano.** Major and minor scales and arpeggios studies from Cramer, Czerny, Bach. Three Part Inventions, French Suites, Mozart; Beethoven sonatas of moderate difficulty; suitable selections from Chopin, other composers of the romantic school.

Admission by examination. Two half-hour lessons and 16 hours minimum practice weekly.

**Music 214P, 224P — Sophomore Piano.** Major and minor scales and arpeggios in all forms and rhythms; studies from Clementi, Czerny, Phillip, Bach, Well-tempered Clavichord, English Suites; Beethoven sonatas, Op. 2, Op. 10, Op. 26; allegro movement



of a concerto; selected compositions from Chopin, Debussy, Mendelssohn, Schubert, etc.

Prerequisite: Completion of Freshman Piano or equivalent. Two half-hour lessons and 16 hours minimum practice weekly.

**Music 314P, 324P — Advanced Piano.** Major and minor scales in parallel and contrary motion, octaves, tenths, sixths, and double-thirds; all forms of broken chords; Bach Preludes and Fugues; Beethoven Sonatas, suitable concertos and concert repertoire; student required to play half-hour recital.

Prerequisite: Completion of Sophomore Piano or its equivalent. Two half-hour lessons and 18 hours minimum practice.

### Strings

**Music 112PVc, 122PVc, 212PVc, 222PVc — Preparatory Violoncello.** Establishment of position; selected studies from Dotzauer, Grutzmacher, and others; appropriate solos.

Admission by examination.

**Music 112PBv, 122PBv, 212PBv, 222PBv — Preparatory Bass Viol.** Establishment of position; studies from Simandl, Book I; scales and bowing exercises.

Admission by examination.

**Music 112PVi, 122PVi, 212PVi, 222PVi — Preparatory Violin.** Principles and establishment of good position; simple scales and arpeggios; exercises from Auer, Kayser, Laoureaux, Sevcik, Wohlfhart; suitable selections from Bach, Beethoven, Corelli, Faure, Handel, Mozart, Vivaldi, and others.

Admission by examination.

**Music 114Vi, 124Vi — Freshman Violin**

**Music 114VA, 124VA — Freshman Viola**

**Music 114Vc, 124Vc — Freshman Violoncello**

**Music 114BV, 124BV — Freshman Bass Viol**

All form of scales and arpeggios in extended range. Selected study material emphasizing various legato and staccato styles; selected solos from the classic and romantic schools of composition.

Admission by examination.

**Music 214Vi, 224Vi — Sophomore Violin**

**Music 214VA, 224VA — Sophomore Viola****Music 214Vc, 224Vc — Sophomore Violoncello****Music 214BV, 224BV — Sophomore Bass Viol**

Three and four octave scales and arpeggios in various rhythms; selected advanced study material; suitable solos from classic, romantic and contemporary composers including works in the larger forms; ensemble literature.

Prerequisite: Completion of Freshman strings or its equivalent.

**Music 112G, 122G — Classical Guitar (1-2)** Class instruction for beginners in guitar. Enrollment only by permission of the instructor.

**Voice**

**Music 113Vo, 123Vo — Freshman Voice.** Elements of vocal culture—breath control, voice production, pure vowels, consonants; scales and arpeggios; vocalises—Concone, Panofka, Vaccai; the simpler songs in English and Italian.

Admission by examination.

**Music 213Vo, 223Vo — Sophomore Voice.** Technical development—the sustained tone of the old Italian bel canto, roulades, runs and trills; the simple opera and oratorio arias of Gluck, Handel, Mozart, Scarlatti; beginnings of German Lieder, English and American songs.

Prerequisite: Completion of Freshman Voice or equivalent.

**Woodwinds**

**Music 112C, 122C, 212C, 222C — Preparatory Clarinet.** Principles of posture, embouchure, articulation; elementary scales and arpeggios; graded studies and duets; selected simple pieces.

Admission by examination.

**Music 114C, 124C — Freshman Clarinet.** Etudes by Klose and Lazarus; major and minor scales, solos and duets.

Admission by examination. Two half-hour lessons and 16 hours minimum practice weekly.

**Music 214C, 224C — Sophomore Clarinet.** Etudes by Langenus, Lazarus, Rose, and Voxman; major and minor scales, orchestral studies; transpositions; solo and ensemble literature.

Prerequisite: Completion of Freshman Clarinet or equivalent. Two half-hour lessons and 16 hours minimum practice weekly.



**Music 112S, 122S — Freshman Saxophone.** Chromatic scales, all major and minor scales and arpeggios. Studies equivalent to Calliet Method, Book II; Rubank, Selected Studies, Klose-Derigny. Complete Method. Representative Solos.

Prerequisite: Admission by examination. Two half-hour lessons and 10 hours minimum practice weekly.

**Music 212S, 222S — Sophomore Saxophone.** Chromatic scales, all major and minor scales and arpeggios. Studies equivalent to Ferling, 48 Etudes, Rubank, Selected Studies; Klose-Derigny, Complete Method. Representative Solos.

Prerequisite: Music 122S or the equivalent. Two half-hour lessons and 10 hours minimum practice weekly.

### Music Theory

**Music 111T, 121T — Elementary Ear Training and Sight Singing (2-0)** Rhythmic, melodic, and harmonic dictation in the major and minor modes; sight singing in the treble and bass clefs. Must be taken concurrently with Music 113T, 123T respectively.

Required of music majors.

**Music 113A — Music Fundamentals (3-0)** An introduction to the elements of music, including study of the staff, clefs, key signatures, scales, time signatures, notation, meter and rhythm; application of theory as the keyboard.

This course is designed for those who lack a background in music theory but who desire to pursue the study of music, or for those desiring an appropriate elective.

**Music 113T, 123T — Elementary Harmony (3-0)** The study of chord building and chord connection including keyboard harmony; triads and their inversions; cadences, modulations to related keys, simple non-harmonic tones, seventh chords, original part-writing exercises. Must be taken concurrently with Music 111T, 121T respectively.

Prerequisite: Ability to read simple music notation. Required of music majors.

**Music 113L, 123L — Introduction to Music (3-0)** A general survey of the development of the art of music designed to provide a basic understanding of the principal periods and styles of music literature; origins, folk music, plainsong, vocal and instrumental forms, elementary acoustics, biographical sketches and bibliography.

No prerequisites for Music 113L; open to non-music majors. Required of music majors.

**Music 211T, 221T — Advanced Ear Training and Sight Singing (2-0)** Continuation of dictation and sight singing studies, including the C clefs, modulation, and chromatic intervals. Must be taken concurrently with Music 213T, 223T respectively.

Prerequisite: Music 121T. Required of music majors.

**Music 213T, 223T — Advanced Harmony (3-2)** A further study of harmony and an introduction to counterpoint; the ninth, eleventh and thirteenth chords, chromatically altered chords, modulation to distant keys, the decorative material of harmony; a survey of the five species. Must be taken concurrently with Music 211T, 221T, respectively.

Prerequisite: Music 123T. Required of music majors.

### **Musical Organizations**

**Music 112B, 122B — Band (1-4)**

**Music 212B, 222B — Band (1-4)**

The official Apache Band, open to any student who has had suitable training. Five hours per week.

**Music 112S — Stage Band (1-2)**

**Music 122S — Stage Band (1-2)**

**Music 112Ch-1, 122Ch-1 (1-3)**

**Music 212Ch-1, 222Ch-1 (1-3)**

A mixed chorus organized for the purpose of singing the more important works of vocal ensemble. Members of this group engage in a wide variety of public performance. Open to students by audition. Four hours per week.

**Music 112Ch-2, 122Ch-2 (1-2)**

**Music 212Ch-2, 222Ch-2 (1-2)**

A women's chorus organized for the purpose of singing representative works written for this medium. Open to all women students without audition. Three hours per week.

**Music 113O, 123O — Symphony Orchestra**

**Music 213O, 223O — Symphony Orchestra**

Open to advanced instrumental students. Members are given practical training in professional orchestral routine in the East Texas Symphony Orchestra.

Admission by audition. Four hours per week.

**Music 111D, 121D — Concert Band (1-2)**



**Music 211D, 221D — Concert Band (1-2)**

An instrumental group which performs symphonic wind ensemble and band repertoire. Open to any student in the college by audition.

**Music 111H, 121H — Harmony and Understanding (0-3)****Music 211H, 221H — Harmony and Understanding (0-3)**

A highly select vocal ensemble. Students are admitted after competitive auditions. Students admitted must concurrently be members of the college choir.

## Nursing

**Nursing 112 — Introduction to Nursing I & II (2-0)** This course is designed to assist the student in her adjustment to college and to the profession of nursing. It includes: a discussion of nursing organizations, qualifications desired, the role of the nurse, career opportunities and a survey of the historical development of nursing from its conception to modern times.

**Nursing 133 — Fundamentals of Nursing (3-8)** Fundamentals of Nursing is designed to serve as a foundation for nursing practice. Experiences are planned to aid the students in developing ideals, attitudes, knowledge and skills which are basic to nursing care. Concepts of mental health, interpersonal relationship, communication techniques and community health are further developed.

The student is given the opportunity to plan and provide total patient care as a member of the health team. Concurrent guided clinical experience is provided in the local hospitals.

**Nursing 143 — Pharmacology and Therapeutics (3-0)** This course is designed to help the student develop an understanding of drugs, their administration, uses, effects and side effects. Emphasis is placed on the basic principles of drug interaction with body tissues and the use of the metric and apothecary system of measurement.

This course also assists the student to become proficient in accurately calculating dosages and/or preparing correct solutions for medication administration. Students will administer medications during the clinical laboratory experience in Fundamentals of Nursing.

**Nursing 216A — Medical and Surgical Nursing (3-8)** This introductory course is designed to assist the student in becoming

familiar with medical and surgical conditions primarily of the adult patient. The content is arranged according to the theory that learning proceeds from the simple to the complex. The systems approach is utilized with the intent of developing a foundation for succeeding subject matter. Concurrent guided clinical experience is provided in the local hospitals and community health experiences are provided when applicable.

**Nursing 216B — Medical - Surgical Nursing (3-8)** This 8 weeks course is a continuation of general information and trends applicable to most medical-surgical patients. Anatomical systems with specific conditions are presented in relation to diagnostic measures, classical pictures, pathology, medical and surgical management, rehabilitation and health teaching, with special emphasis on the nursing care of these patients. Concurrent guided clinical experience is provided in the local hospitals, and community health experiences are provided when applicable.

**Nursing 216C — Medical - Surgical Nursing (3-8)** This course is a study of nursing techniques and skills applied to the patient with neoplastic diseases and patients in need of surgical intervention. Emphasis is placed on total patient care as affected by the aseptic oriented environment and cyclic rotation experiences are provided for each student. Principles taught include, asepsis, mental health concepts, community health and health teaching. Concurrent laboratory practice is provided in the local hospital.

**Nursing 226 — Psychiatric Nursing, Principles and Practices (3-8)** This course is designed to help the student develop a better understanding of man's behavior and how this relates to illness and health. A study of etiology, symptomology, course and treatment of common types of psychiatric disorders is presented. Emphasis is placed upon an understanding of the principles and methods employed in psychiatric nursing. The student should gain an appreciation of related social problems and an awareness of his/her responsibility in the community mental health program. Concurrent guided clinical laboratory practice is provided for the student at a local hospital and Community Mental Health Agencies in the Tyler Area.

## Nursing Home Administration

**Nursing Home Administration 113 — Introduction to Nursing Home Administration (3-6)** Review is made of the history and philosophy of nursing homes. Understanding and review and application of nursing home standards, the typical working



organization, and the study of gerontology. Preparation of job descriptions for the nursing home staff. Review of the functions, methods, and procedures of administering a nursing home including policy writing for admission, discharge, patient care, transfer, emergency, operations, etc. The course assists the administrator in defining and relating the concepts, technology and other technical aspects of nursing home operation.

**Nursing Home Administration 113A — Psychology of Patient Care**

**(3-0)** This course familiarizes the administrator with the personality dynamics involved in helping the geriatric patient adjust to his new dependent environment — understanding of problems specifically related to psychological, emotional, and social needs, with an introduction of alternate courses of action to meet these needs.

**Nursing Home Administration 123 — Technology of Patient Care**

**(3-0)** This course includes a detailed study of the technical aspects of nursing home operation, including medical records, pharmacology, and medical terminology, patient care and nursing procedures, safety, physical therapy equipment, recreational therapy, and sanitation.

**Nursing Home Administration 123A — Nursing Home Administration Law (3-0)**

Nature and scope of Law; court system; law of contracts; principal and agent; business organizations, including partnerships and corporations; State community property laws, torts, bailments, employer/employee relationships; introduction to theory and practice of insurance as applicable to owners of nursing homes with emphasis on burden of financial loss, contractual arrangements and contracts; legal liabilities for bodily injury and property damage to patients and visitors. Medicare, Medicaid, and government regulations; environmental health and safety regulations, local health and safety standards.

**Nursing Home Administration 213 — Nursing Home Internship I**

**(with seminar) (3-20)** Management Internship supervised by a Preceptor-Administrator approved by the State Board of Licensure of Nursing Home Administrators, in an approved facility. Three hours classroom plus twenty hours of on-the-job administrative training per week. Critique of current job and its related experience and correlate these experiences to classroom discussions of ways to assist the new entrant into the nursing home administrative career field.

**Nursing Home Administration 213A — Financial Management of the Nursing Home (3-0)**

Techniques and Strategies of financial

information for management decision-making in the nursing home, emphasizing the budgeting process and relationships between statistical and financial data. Includes study of special accounting requirements of Medicare and other government programs.

**Nursing Home Administration 223 — Nursing Home Administration Internship II (3-20)** Management Internship supervised by a Preceptor-Administrator approved by the State Board of Licensure of Nursing Home Administrators, in an approved facility. Three hours classroom plus twenty hours of on-the-job administrative training per week. Critique of current job and its related experience, correlating these experiences to classroom discussions of ways to assist the new entrant into the nursing home administrative career field.

**Nursing Home Administration 223A — Nutrition and Quantity Foods (2-4)** Fundamental principles of nutrition and metabolic process. Food selection and quality of nutrients in normal and therapeutic diets related to needs of patient.

Food problems of institutions including menu planning, food costs, preparation, and serving in large quantities.

## Ophthalmic Technician and Dispensing

**Ophthalmic Dispensing 113 — Ophthalmic Materials and Laboratory I (2-4)** The history and development of glass. Basic optical terminology. Fundamentals of lens manufacturing. Explanation of the functions of lens grinding and polishing machines. Computations for grinding lenses. Truing of tools and use of gauges.

**Ophthalmic Dispensing 113B — Introduction to Lenses and Frame Measurements (3-0)** This is an introduction to the study of the ethics, practices and responsibilities of the ophthalmic dispenser. Particular emphasis is placed on measurements as determined by lens and eye characteristics as well as frame selection in relation to the facial contour, facial features, and the patient's personality. Measuring of an individual's inner ocular distance to determine the placement of lenses is also studied.

**Ophthalmic Dispensing 123 — Ophthalmic Materials and Laboratory II (2-4)** Methods of grinding and polishing spherical and cylindrical surfaces. Use of the lens generating machines. Blocking lenses by hand and by machines. Principles of computing lens



curves and thicknesses. Prism grinding. Use of laboratory charts. Methods for laying out and marking single vision and multifocal lens blanks. Special considerations in grinding and polishing complex prescriptions in glass and plastic lenses. Operation of the lens hardening machines.

**Ophthalmic Dispensing 123A — Anatomy and Physiology of the eye (3-0)** A study of the anatomy and physiology of the eye and its associated structures such as the lids, lacrimal apparatus, muscles and the orbit. Topics include: structure and function of the cornea, lens and retina; refraction at Plane and Spherical surfaces, Spherical surfaces and Prisms; thin lens optics, and Photometry.

**Ophthalmic Dispensing 213 — Ophthalmic Materials and Laboratory III (3-4)** Interpretation and analysis of the shop order. Selecting the proper tools and blanks. Preparation of lens for cutting and edging to size. Operation of the automatic edging and beveling machines. Hand edging of lenses. Practice in inserting lenses into plastic and metal frames. Drilling and mounting lenses into rimless spectacles. Special techniques in handling plastic lenses. Instruction in use of the lensometer and vertometer. Evaluation and analysis of completed spectacles for accuracy and quality.

**Ophthalmic Dispensing 213A — Ophthalmic Dispensing I (5-4)** Study of the ethics, practices and responsibilities of the ophthalmic dispenser. Taking ocular measurements. The use of various measuring instruments. Prescription analysis and interpretation of single vision, multifocal and prism lenses. Considerations in making glasses for occupational use. Tinted lenses and their uses. principles and techniques of skillful fitting and adjusting of spectacles.

**Ophthalmic Dispensing 213B — Principles of Optics II (1-3)** A continuation of Principles of Optics I. Topics include: Thick lens systems; Vertex power of lenses; Theory of Optical Instruments; Aberrations of lenses; Interference, diffraction and polarization of light, laboratory work illustrates and supplements the lecture material.

**Ophthalmic Dispensing 223 — Contact Lenses (2-4)** An introduction to contact lens theory and practice. Topics include: History, Development and Manufacture of Contact Lenses. Use of keratometer and ophthalmometer, Optics of contact lenses. Fitting of corneal, scleral and cosmetic contact lenses. Patient Management. Use of biomicroscope and fluorescein in evaluation of lens fit for optimum performance.

**Ophthalmic Dispensing 223A — Ophthalmic Dispensing II (3-5)**

Psychology of dispensing. Consideration of style and fashion in eyewear. Dispensing procedures relating to bifocals and complex prescriptions. Considerations of the visual problems of the aphakic patient. Techniques of fitting and adjusting of plastic, metal and rimless spectacles. Dispensing of occupational spectacles. Office management. Evaluation and analysis of completed spectacles for accuracy and quality.

**Ophthalmic Dispensing 223B — Special Visual Aids (2-2)** A study of the various devices to aid the sub-normal vision patient. Use of magnifiers, loupes, projection devices and aspheric magnifiers. Fitting of telescopic and microscopic spectacles and other aids. Considerations of illumination, size of type and working distance on visual performance.

**Ophthalmic Dispensing 113S, 123S, 213C and 223C — Practicum:** Practical experience in offices and laboratories of dispensing opticians. Assignments in work related experiences will be rotated to enable the student to obtain experience in all types of Ophthalmic Dispensing.

## Petroleum Technology

**Petroleum Technology 113 — Petroleum Development (3-0)**

Exploration methods, principles of oil field development, spacing of wells, rotary and cable tool drilling methods, drilling fluids, directional drilling, oil field hydrology, well completion practices.

**Petroleum Technology 112A — Rotary Drilling Fluids (1-3)**

Testing methods, determining drilling fluid characteristics, drilling fluid problems, use of special drilling fluids, laboratory exercises consisting of practice in altering the properties of fresh water and special drilling fluids for drilling through troublesome zones with the rotary system.

**Petroleum Technology 112B — Drilling Equipment Field Laboratory (2-2)** Trips to examine different types of drilling equipment in actual operation in the field. Also trips to service companies to study their drilling tools.

**Petroleum Technology 121 — Oil Field Records (1-1)** A study of records kept by oil companies and reports made within companies and to the railroad commission.



**Petroleum Technology 123 — Production Methods (3-0)** Methods of production of oil, including lease layout and operation, operation of treating equipment, well stimulation and work over.

**Petroleum Technology 122A — Production Equipment Field Laboratory (2-2)** Trips to examine different types of production equipment and treating equipment in actual operation and gas lift.

**Petroleum Technology 213 — Introduction to Petroleum Industry (3-0)** General study of the industry, including history of the industry, chemistry of petroleum, its occurrence in nature and its importance in the world economy, leasing and royalty exploration, drilling and production methods, conservation, transportation and refining, economics of the oil industry.

**Petroleum Technology 212A — Well Logging Methods (2-0)** A study of theories of electrical, micro-electrical radiation, optical chemical, and mechanical well logging methods and application of these theories, field examples and problems.

**Petroleum Technology 213A — Petroleum Laboratory Methods (2-3)** Tests made in the oil industry. Emulsion breaking, field tests made on crude oil, elementary refinery tests, corrosion tests, and lubricating oil tests and subsurface laboratory methods.

**Petroleum Technology 222 — Planetable Surveying for Geophysics (1-3)** Use of the planetable and alidade in surveying as applies to use by geophysical party.

**Petroleum Technology 222C — Hydraulics for Petroleum Technologists (2-0)** Hydraulics in drilling, in oil pipelines, and in artificial lift.

**Petroleum Technology 222B — Geophysical Methods (2-1)** Theory of geophysical methods; one complete problem in Seismic coverage of an area.

**Petroleum Technology 222A — Natural Gas Production (2-0)** Field handling of natural gas, study of methods, equipment technology of natural gas.

## Photography

**Photography 123 — Basic Photography (2-4)** The basic techniques, theory and practice of black and white photography. Study of exposure, development and printing, photographing of technical activities and equipment included with emphasis on composition.

Credit cannot be given for this course and Journalism 123P or Technical Illustration 113. Laboratory fee: \$6.50.

## Physical Education

Through the program of Physical Education, opportunity is provided for each student to gain knowledge and skill in many recreational activities to achieve a present level of physical fitness and to develop an understanding of the role of continued participation in exercise for total health and personal enjoyment of leisure time.

A program of intramurals is provided for both men and women, in addition to the activity classes which are required of all freshmen, meeting two hours per week for one semester hour of credit. Many students elect to meet the additional year's requirement included in the 4-year degree plans of most colleges and universities.

### PHYSICAL EDUCATION FOR WOMEN

Activity Courses for the Physical Education Requirement:

- 111B — Basketball and Softball (0-2) (2nd semester)**
- 111C — Speedball and Volleyball (0-2) (1st semester)**
- 111D — Archery and Badminton (0-2)**
- 111E — Beginning Tennis (0-2)** Basic skills and techniques of tennis.
- 121E — Intermediate Tennis (0-2)** Practice in basic skills; addition of strategy and intermediate strokes.
- 111F — Beginning Modern Dance (0-2)** (Open to Speech and Drama Majors) — Poise, balance and self-expression through fundamental dance movements.





WAGSTAFF GYMNASIUM

- 211F — Intermediate Modern Dance (0-2)** (Open to Speech and Drama Majors) — Emphasis on dance composition and choreography.
- 111G — Beginning Gymnastics (0-2)** Includes tumbling, uneven parallel bars, balance beam, trampoline, and floor exercise.
- 211G — Intermediate Gymnastics (0-2)** More advanced level of gymnastic activities.
- 111H — Folk Dance (0-2)** International dances and their historic development.
- 111M — Body Mechanics (0-2)** Concerned with figure, posture, physical performance ability, and exercise.

**111T, 121T, 211T, 221T — Advanced Tennis (0-2)** A course for men and women desiring to participate in inter-collegiate tennis. Admission by consent of the instructor.

Activity Courses for Physical Education Majors and Minors:

These courses are designed to include teaching techniques and drills in the various sports, as well as practice in the skills and strategy of each sport.

**221B — Basketball and Softball (1-2)** (Offered spring semester odd numbered years)

**211C — Speedball and Volleyball (1-2)** (Offered fall semester even numbered years)

**221D — Badminton and Archery (1-2)** (Offered spring semester even numbered years)

**211E — Tennis (1-2)** (Offered fall semester odd numbered years)

**Physical Education 113H — Foundations of Physical Education (3-0)** A survey of the field of physical education, its historical development and philosophy as well as an analysis of contemporary concepts of program direction and content.

**Physical Education 123H — Concepts of Healthful Living (3-0)** Presentation of current scientific and technical information in matters related to health, emphasizing a person's need to understand factors in the culture influencing health and his responsibility as a consumer and citizen, including such areas as consumer health, nutrition; mental health, tobacco, alcohol, and drugs, family life, environmental health, and disease.

**Physical Education 113C — Art of Daily Living (3-0) (Women)** A course designed to place emphasis on the needs and activities of the individual student to assist in making proper adjustments. The fundamental aim is to develop self-assurance through knowledge that one's health, appearance, clothes, styling, make-up, and posture are correct. Students are given personalized instruction with respect to their own problems. By means of lectures, demonstrations, practice, and opportunities to perform in public, an effort is made to develop in the student greater poise and alertness. Instruction includes techniques for balance and control of movement, selection and care of clothing.

**Physical Education 123C — Art of Daily Living (3-0) (Women)** A continuation of Physical Education 113C.



**Physical Education 213C — Appreciation of Dance (3-2) (Women)**

Basic fundamentals and interpretations of dance; the principles and applications applied to the interpretation of modern and conventional dance.

**Physical Education 223C — Appreciation of Dance (3-2) (Women)**

A continuation of Physical Education 213C.

**PHYSICAL EDUCATION FOR MEN**

**Physical Education 111, 121, 211, 221 (0-2)** Includes such activities as calisthenics, isometrics, karate, football, basketball, volleyball, track, tennis, softball, and other physical fitness activities.

**Physical Education 113 — Methods (2-2)** The organization and administration of physical education in the public schools. The course of study for physical education as recommended by the Texas State Department of Education for high schools is used as a basis for study. Laboratory periods are devoted to actual problems in the field.

**Physical Education 123 — Methods (2-2)** A continuation of Physical Education 113 with special attention given to problems in the physical education field.

**Physical Education 113A — Theory of Football and Track (3-0)**

**Physical Education 113T — Theory of Tennis (3-0)**

**Physical Education 123A — Theory of Basketball and Baseball (3-0)**

**Physical Education 213 — Health and Hygiene (3-0)** A study of personal and community health. A study is made of causative factors of diseases, their means of transmission and prevention.

**Physical Education 213A — First Aid (3-0)** Training for ARC Standard, Advanced and Instructor's first aid cards (when certified instructor available). Students meeting the requirements for each of these programs awarded ARC certificates.

**Physical Education 223 — Sports Understanding (3-0)** This course is especially designed for those who wish to develop a complete understanding of sports both major and minor. Rules, terminology, and finesse are studied.

**Physical Education 223A — Athletic Training and Conditioning (3-0)** A course in the practical and theoretical study of massage,

taping, bandaging, care of sprains, bruises, strains and wounds. A course designed to acquaint the student with the problems of the athletic training room and to provide him with the practical instruction to aid in the solution of these same problems.

## Physics

Students majoring in physics are encouraged to take Mathematics 113A and Mathematics 113B in summer school so that they may enroll in Mathematics 213 in the Fall semester thereby eliminating the need for concurrent enrollment in Mathematics 213 and Physics 124A in the Spring semester. Students with a strong background in mathematics may be able to omit these courses (see the section on Mathematics and Engineering in this catalogue).

**Physics 113 — Physics Problems (3-0)** The use of the slide rule, preparation and interpretation of graphical data. Problems from physics and engineering are used as exercises. Required of students in Electronics, Drafting, and Petroleum Technology.

**Physics 114B — General Physics (3-3)** A course for premedical students, majors in pharmacy and architecture, and other students who need a two-semester technical course in physics but who do not intend to take additional courses in physics.

Mechanics, heat, and sound.

**Physics 124B — General Physics (3-3)** A continuation of Physics 114B.

Electricity and magnetism, light, atomic and nuclear physics.  
Prerequisite: Physics 114B.

**Physics 124A — Mechanics (3-3)** A course for students who intend to major in physics, chemistry, or mathematics.

Prerequisite: Credit or registration in Mathematics 213.

**Physics 214A\* — Advanced Physics (3-3)** Heat, Wave-motion, and optics.

Prerequisite: Physics 124A, or Engineering 213, and credit or registration for Mathematics 223A.

**Physics 224A\* — Advanced Physics (3-3)** Electricity and magnetism.

Prerequisite: Physics 124A or Engineering 213 and credit or registration for Mathematics 223A.

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\* Physics 214A - 224A are designed to meet the second year physics requirements of students in engineering, chemistry or mathematics.



## Psychology

**Psychology 111 — Freshman Orientation.** Freshman Orientation is a course designed to help students bridge the gap between high school and college. Library usage, study habits, good attitudes, and budgeting of time are taught. The interpretation of standardized tests and vocational counseling are included in the course. Required of all beginning students unless excused by the Academic Vice President.

**Psychology 113A — Psychology of Learning (3-0)** Fundamental mental and psychological principles underlying motivation, behavior, individual difference, and the learning processes.

The student may not count both Education 113 and Psychology 113A for credit.

**Psychology 111A — Psychology of Learning (1-0)** This is the first one-third of Psychology 113A offered on a one semester hour basis in the evening college.

**Psychology 111B — Psychology of Learning (1-0)** This is the second one-third of Psychology 113A offered on a one semester hour basis in the evening college.

**Psychology 111C — Psychology of Learning (1-0)** This is the final one-third of Psychology 113A offered on a one semester hour basis in the evening college.

**Psychology 213 — Introductory Psychology (3-0)** A study of the basic principles of psychology, bearing on individual differences, intelligence, the development of personality, growth, motivation, drives, emotions and learning.

Prerequisite: Sophomore standing.

**Psychology 223 — Applied Psychology (3-0)** The application of psychological principles to common adjustment and behavioral problems, career choice and everyday activities of life and work.

Prerequisite: Sophomore standing.

**Psychology 223A — Child Growth and Development (3-0)** How children grow and develop, the stages in the process and the physical, social, mental and emotional factors which influence growth and development up to adolescence are considered.

## Radiologic Technology

**Radiologic Technology 111 — Nursing Procedures (1-0)** A course designed to acquaint the student with nursing procedures and techniques used in the general care of the patient with emphasis on the role of the radiologic technologist in various nursing situations.

**Radiologic Technology 112 — Clinical Practice I (2-25)** The radiologists, technical directors of the Radiology Departments and clinical instructors will supervise students in the use and care of all equipment. The course consists of film critiques, sessions on departmental routines and additional study in any area of specialization in accordance with the needs of the individual student.

**Radiologic Technology 113 — Radiologic Technology I (3-0)** A general introduction to radiologic technology. This course covers orientation and elementary radiation protection, professional ethics, basic darkroom practices, principles of radiographic positioning and exposure and common radiographic procedures using contrast media.

**Radiologic Technology 113A — Radiologic Physics I (3-0)** A course presenting a general review of basic mathematic, mechanics, structure of matter and magnetism. This course also gives an introduction to electricity, electromagnetism and electric motors and generators.

**Radiologic Technology 113B — Anatomy and Physiology (3-0)** Presents the student basic instruction of the various systems, structures and organs of the body and their functions. This course enables the student to interpret accurately requests for x-ray examinations, to properly position the part to be radiographed, to recognize the structures and organs visualized and to understand the normal functions of organs as a basis for certain x-ray examinations.

**Radiologic Technology 123 — Radiologic Physics II (3-0)** A continuation of Radiologic Physics I. The course is designed to present the fundamentals of radiation physics and the basic principles underlying the operation of x-ray equipment and auxiliary devices.

**Radiologic Technology 123A — Radiologic Technology II (3-0)** A continuation of Radiologic Technology I and including pediatric radiology.



**Radiologic Technology 123B — Basic Related Science I (3-0)** A course designed to present instruction in darkroom chemistry and technique, medical terminology and topographic anatomy.

**Radiologic Technology 123C — Clinical Practice II (3-25)** A continuation of Clinical Practice I.

**Radiologic Technology 113S — Clinical Practice III (3-37)** A continuation of Clinical Practice II.

**Radiologic Technology 123S — Clinical Practice IV (3-37)** A continuation of Clinical Practice III.

**Radiologic Technology 123 — Clinical Practice V (3-25)** A continuation of Clinical Practice IV with experience in the nuclear medicine laboratory.

**Radiologic Technology 213A — Basic Related Science II (3-0)** A course designed to cover the study of protection to patient and personnel, radiation therapy and nuclear medicine procedures.

**Radiologic Technology 213C — Radiologic Technology III (3-0)** A continuation of Radiologic Technology II with advanced study in radiographic exposure and positioning and including intraoral radiography.

**Radiologic Technology 223 — Clinical Practice VI (3-25)** A continuation of Clinical Practice V. Includes training in radiation therapy given on an individual basis in the radiologist's private offices and experience in the special procedures department.

**Radiologic Technology 223A — Radiologic Technology IV (3-0)** This course consists of instruction dealing with equipment maintenance, administration of the radiology department and a general review.

**Radiologic Technology 223B — Basic Related Science III (3-0)** A course designed to cover the study of special procedures and medical and surgical diseases.

**Radiologic Technology 213S — Clinical Practice VII (3-37)** A continuation of Clinical Practice VI.

**Radiologic Technology 223S — Clinical Practice VIII (3-37)** A continuation of Clinical Practice VII.

## Real Estate Management

**Real Estate Management 113 — Principles and Practice of Real Estate (3-0)** A general introductory course in real estate fundamentals and principles. Includes a study of the rudimentary principles of conveyancing; the general purposes and effects of deeds, deeds of trust, mortgages, liens, and other real estate contracts; fundamentals of agency; principles of real estate practice and ethics. Applicable towards real estate salesman's license.

**Real Estate Management 113A — Real Estate Practice I (3-0)** A study of the procedures and problems in establishing and conducting a real estate business. Includes establishing the office, securing and listing properties; showing properties; securing financing, and closing procedures; obligations between principal and agent; functions of a real estate business; professional practice and canons of ethics.

**Real Estate Management 113B — Introduction to Land Records (3-3)** A study of the history of Texas land from state ownership to private ownership including patents, land grants, public school lands. Requirements and methods of recording and maintaining public records in city, county, and state offices. Actual practice in methods of using public land records to determine ownership.

**Real Estate Management 123 — Real Estate Law (3-0)** A study of real estate law and procedure involving real property acquisition, ownership, and transfer including listing agreements, deeds, liens, mortgages, Law of agency and governmental requirements. Applicable towards real estate broker's license.

**Real Estate Management 123A — Real Estate Finance (3-0)** An analysis of the procedures in financing and mathematics of real estate finance; where and how to obtain funds; security devices such as mortgages and related instruments; return of mortgage and equity capital. Problems, policies, and risk involved in financing various types of real property. Applicable towards real estate broker's license.

**Real Estate Management 123B — Real Estate Appraising (3-0)** A course designed to develop an understanding of the principles and methods of appraisals used in estimating market value of real property. Includes techniques and factors considered in appraising residential, commercial, and income property; preparation of appraisal reports. Applicable towards real estate broker's license.



**Real Estate Management 213 — Methods in Land Title Investigation (3-3)** An application of the techniques used in acquiring and analyzing information pertaining to land and mineral ownership; use of abstract and public records; information required in chaining land titles.

Prerequisite: Real Estate Management 113B or consent of instructor.

**Real Estate Management 223 — Property Management I (3-0)** Stresses the management, maintenance, rehabilitation, purchase, and sale of residential, commercial, and industrial properties. Includes leases, rehabilitation, insurance, tax aspects, record keeping, public relations, and advertising.

**Real Estate Management 223A — Real Estate Title Insurance, Abstract, Escrow and Closing Procedures (3-0)** A case method presentation in escrow procedure including actual processing of sale escrows. This includes familiarization and drawing of documents, processing of and closing the escrow, prorations, and details appurtenant to efficient escrow processing.

**Real Estate Management 223B — Real Estate Practice II (3-3)** Students will be assigned tracts of land to determine surface, royalty and mineral ownership. Defects in ownership will be corrected by obtaining corrective instruments, affidavits, etc.

Prerequisites: Real Estate Management 213 or consent of instructor.

**Real Estate Management 213B — Fire and Casualty I (3-0)** A study of the following types of Fire and Casualty Insurance: Fire insurance, Legal Liability and Automobile Insurance, General Liability, Homeowners and Farmowners, Workmen's Compensation, Crime, Fidelity and Surety, Commercial Multiple Peril, Inland Marine, Miscellaneous lines of Insurance, Fundamentals of Rating.

**Real Estate Management 123C - 213C - 223C — Real Estate Internship (1-20)** Internship is open only to students enrolled in the Real Estate Management Program. This provides actual work experience in the real estate office, fire and casualty insurance office, abstract and title insurance office, and the petroleum land management office. The student, the employer and the program coordinator develop an individual program for each student. The student is evaluated by both the employer and the program coordinator. Students employed full time in the field of Real Estate may not enroll in the Internship courses.

**Real Estate Management 223D — Fire and Casualty II (3-0)**

A continuation of Real Estate Management 213B. Real Estate Management 213B and 223D applicable toward the Fire and Casualty Local Recording Agent License.

Prerequisite: Real Estate Management 213B.

## Recreation Leadership

**Recreation 113 — Introduction to Recreation Services (3-0)** Introduces the basic fundamentals of the nature, scope and significance of organized recreation services. It includes a study of factors involved in the operation of basic recreation units, major program areas, organizational patterns and the interrelationship of special agencies and institutions which serve the recreation needs of society.

**Recreation 113C — Seminar (6-4)** To properly acquaint the student with the nature and diversity of recreation programs and services available; all field work will occur in settings with distinctly different philosophies, organizational structures and clientele served.

**Recreation 123 — Social Recreation (2-2)** Introduces methods and materials for planning, organizing and conducting social activities for groups of various sizes and ages in a variety of social situations. Emphasis is on the methods of planning and presenting a repertoire of activities for social recreation events. Major activities will be discussed, played, and/or demonstrated.

**Recreation 123B — Field Work I (1-15)** A course designed to give the recreation student practical experience under supervision. The first experiences should have the student working with an agency leader as a junior leader. Experience will involve leadership responsibilities of planning, conducting, and evaluating an activity or program. Prerequisite: Seminar

**Recreation 213 — Group Leadership (3-0)** Provides insight into the theory, principles, and practice of planning, organizing and conducting effective recreation programs for various groups. Emphasis in on group environment.

**Recreation 213C — Camp and Club Management (3-0)** The process of managing by planning, organizing, directing, coordinating, and controlling employees and participants is studied and practiced using case studies. Including a survey of: Camp and Club Organization and Structure; Personnel; Program; Business Management; Health and Safety; Public Relations; Committees and Boards; Evaluation of Operation and Results; Role of Director.

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**Recreation 213B — Field Work II (1-20)** The second supervised course designed to give the student practical experience in developing recreation leadership skills. The student should work as a direct leader. Prerequisite: Seminar and Field Work I.

**Recreation 223B — Program Planning and Organization (3-0)** A study of essential elements and basic principles involved in the organization, supervision, promotion and evaluation of various types of recreation programs. Emphasis is on organized programs and services.

**Recreation 223C — Field Work III (1-20)** The third course designed to give the recreation student practical experience under supervision. The student should work as an indirect leader by assisting a group or individual in planning, conducting and evaluating group or individual activities. Prerequisites: Seminar, Field Work I and II.

**Recreation 223D — Water Related Sports (3-0)** This course is designed to acquaint the student with aquatic activities and their relationship to the recreation program. It is a practical course where participation is required to adequately obtain the skills and techniques of such activities as canoeing, angling and sailing. Time will be devoted to the organization of aquatic programs as well as to the operation and maintenance of water areas.

**Recreation 113S — Special Problems (1-20)** The assignment to a position of recreation leadership, involving planning, conducting and evaluating the work assignment. Student will be responsible for journal of activities and an evaluation of such.

**Recreation 123S — Special Problems (1-20)** Continuation of 113S. Prerequisite: Recreation 113S.

**Recreation 113A — Handcraft (2-4)** For recreational leaders, prospective teachers or workers with therapeutic art for hospital work or for anyone wishing to develop a hobby. Study and practice of weaving, modeling, carving and leathercraft.

**Recreation 123A Science Crafts (2-4)** To develop the student's creativity and aid him to become acquainted with the assets offered from the world in which he lives. Develops the use of nature-produced craft projects for his future programs.

**Recreation 123C — Individual Lifetime Sports (2-2)** A survey of the basic terminology, skills, and rules for selected individual lifetime sports and their use in recreation. Emphasis is on knowledge and understanding of the organization, administration, and

promotion of sports which have carry-over value rather than on mastery of performance skills.

**Recreation 213A — Outdoor Recreation (2-2)** Includes study of the history, development, and trends of outdoor recreation, conservation, and organized camping. Emphasis is on laboratory work, field trips, and the development of outdoor skills.

**Recreation 223A — Folk, Square and Social Dancing (1-4)** Through practical experience, the student will be instructed in the fundamental skills of folk, square and social dancing. Emphasis will be placed on promoting, planning, programming, and conducting these types of dances in a recreation setting.

## Religious Studies

Religious Studies courses for college credit at Tyler Junior College are taught in the Baptist Chair of Bible, the Bible Chair of the Texas Methodist Student Movement, the Fifth Street Presbyterian Bible Chair, and the Church of Christ Bible Chair.

The granting of college credit for such courses is on the following basis:

- (1) All such courses must be based upon comprehensive syllabi approved by Tyler Junior College.
- (2) Such courses may not be taught from a sectarian view point but must be historical or literary in nature.
- (3) The teacher of such courses must meet the same standards of academic preparation as required of teachers in other academic disciplines in the College.
- (4) A maximum of twelve semester hours will be accepted toward a degree.

**Religious Studies 111 — Selected Studies in the Old Testament (1-0)** A brief course of study involving either an Old Testament book or theme.

**Religious Studies 111A — Selected Studies in the New Testament (1-0)** A brief course of study involving either a New Testament book or theme.

**Religious Studies 111B — Selected Studies in Church History (1-0)** A brief course of study involving either a general synopsis of Church History, a particular era of Church History, or a History of the Bible.



**Religious Studies 111C — An Introduction to Christianity (1-0)**

A brief course of study involving theological terms, great Bible themes, and a comparison of Christianity with other religions.

**Religious Studies 113 — The History of Judaism (3-0)** A History of Judaism during the Old Testament period as seen from the perspective of all the Old Testament writers.

**Religious Studies 123 — History of Christianity (3-0)** A History of Christianity during the New Testament period as seen from the perspective of all the New Testament writers.

**Religious Studies 213 — Philosophy of Religion I (3-0)** A study of the philosophy and teachings of Jesus Christ as viewed from the perspective of the writers of the Gospels.

**Religious Studies 223 — Philosophy of Religion II (3-0)** A study of the philosophy and teachings of Paul and their part in the early spread of Christianity as viewed from Acts and the Pauline writings.

## Respiratory Therapy Technology

**Respiratory Therapy 113 — Respiratory Therapy Orientation (3-7)**

This course is designed to orient the student to the medical and hospital practice, paramedical personnel, nursing and respiratory therapy. This course calls for seven hours of supervised clinical activity in addition to the lecture sessions.

**Respiratory Therapy 123 — Basic Technology (3-4)** A study of the basic techniques, procedures and equipment used in respiratory therapy.

**Respiratory Therapy 123A — Clinical Laboratory I (3-10)** A study of the basic techniques and procedures of respiratory therapy. Such applications as patient approach, patient comfort, patient movement and positioning, blood pressure, pulse, respiration and others are included.

**Respiratory Therapy 113S — Clinical Practice I (5-35)** The practice of basic procedures in respiratory therapy. The application of basic equipment used in respiratory therapy.

**Respiratory Therapy 123S — Clinical Practice II (5-35)** The practice of basic procedures in respiratory therapy. The application of basic equipment used in respiratory therapy.

**Respiratory Therapy 213 — Clinical Topics I (4-0)** A study of drugs used in respiratory Therapy, Laws, Administration, use, effects and side-effects.

**Respiratory Therapy 213A — Clinical Application (3-10)** The study and practice related to clinical respiratory disease and patho-physiology in medical and surgical practice.

**Respiratory Therapy 213B — Advanced Technology I (3-4)** The fundamentals of respiratory therapy equipment behavior and respiratory therapy techniques. Evaluation of equipment and techniques.

**Respiratory Therapy 213C — Clinical Topics II (3-0)** Clinical topics related to respiratory disease and therapy, including basic clinical bacteriology, control of infection, and pathological processes.

**Respiratory Therapy 223 — Management Topics (3-0)** Management of respiratory therapy operations, including management, supervision, records, and economics.

**Respiratory Therapy 223A — Clinical Application (3-0)** (Continuation of Respiratory Therapy 213A)

**Respiratory Therapy 223B — Advanced Technology II (3-0)** A study of equipment and techniques in respiratory therapy and respiratory evaluation.

**Respiratory Therapy 223C — Clinical Practice III (3-17)** Clinical practice of respiratory therapy and related aspects of nursing arts. Experience as a practicing technician plus correlation with advanced clinical and technological concepts.

## Sociology and Anthropology

**Anthropology 213 — Social Anthropology (3-0)** A consideration of various forms of social institutions, such as the family, clan, kin groups, community, sodalities, religion, and government, found over the world and exemplified by such people as the Apache and Hopi Indians, Australians, Samoans and Hottentots. Various schools of Social Anthropology theory are summarized.

**Anthropology 213A — Introduction to Anthropology (3-0)** Principles of physical and cultural anthropology; analysis of the cultures of prehistoric and existing preliterate people; impact of modern western culture on preliterate societies.

**Anthropology 223 — Cultural Anthropology (3-0)** A comparative study of culture and social organization among primitive or preliterate societies. Emphasis upon marriage, property, reli-



gion, magic and tribal control. Attention is also given to the significance of the study of primitive cultures for an understanding of urban industrial civilizations.

**Sociology 113D — Introduction to Social Sciences (3-0)** A developmental course dealing with the concerns and concepts of American History, Government, and Sociology. Emphasis is on building the skills required to deal with college material covering these disciplines.

**Sociology 213 — Introduction to Sociology (3-0)** Basic concepts and principles of social behavior; relationships of culture and social interactions to human behavior; analysis of existing group structures and social organizations.

Prerequisite: Sophomore Standing.

**Sociology 223 — Social Problems (3-0)** Application of sociological concepts and methods to the analysis of current social problems which include juvenile delinquency, adult offenders, alcoholics, suicides, family disorganizations and crimes in the community.

Prerequisite: Sophomore Standing.

## Speech and Drama

The Speech and Dramatic Arts program at Tyler Junior College is designed to give the student majoring in these fields a complete and well rounded choice of courses required in the first two years of a baccalaureate degree program. These courses should be taken in the following sequences:

1. **For Speech majors:** Speech 113C; Speech 123A; Speech 113; Speech 213A
2. **For Drama majors:** Speech 113C; Speech 123A; Speech 123C; Speech 123B; Speech 213A
3. **For Radio-Television majors:** Speech 113C; Speech 123A; Speech 123D
4. **For Speech Therapy majors:** Speech 113C; Speech 123A; Speech 223B

Tyler Junior College counselors will assist the student in planning his program according to the catalogue requirements of his senior college choice.

**Speech 111 — Parliamentary Procedure (1-0)** A course covering correct procedure in the forming of an organization and how to conduct meetings properly.

**Speech 113 — Public Speaking (3-0)** Practice in platform delivery; planning, organizing and delivering general platform speeches. Principles and types of speeches involved in the areas of platform speaking, rhetoric and public address. Speech 113 and Speech 223A cannot both be counted for credit.

**Speech 113A — Fundamentals of Speech (3-0)** This is a basic course in the planning, organizing and delivery of general platform speeches. Particular emphasis is placed upon voice development, variety in expression, and platform delivery. The student is required to apply theory to actual speaking situations. The final evaluation is based upon performance and a written examination.

**Speech 113B — Speech for Prospective Teachers (3-0)** Improvement in the prospective classroom teacher's self-command of the basic requirements of good speech; understanding the practical application of speech experience in guiding and promoting the learning of students. Speech 113A and Speech 113B cannot both be counted.

**Speech 113C — Voice, Diction, and Phonetics (3-0)** The basic principles of diction, including the physiological description and visual notation of speech sounds; the basic principles of voice development and interpretation; intensive practical application through classroom exercises and special projects to meet individual vocal needs and professional objectives. Speech 113A and Speech 113C cannot both be counted.

**Speech 123A — Oral Interpretation (3-0)** Theory and practice in understanding and interpreting the printed page; oral presentation of the various literary forms; individual projects in interpretative reading with continued development of an expressive voice.

Prerequisite: Speech 113A, 113C or consent of the instructor.

**Speech 123B — Fundamentals of Acting (2-2)** Theory and practice in bodily control, voice, pantomime, interpretation, characterization, and stage technique. Analysis and study of specific roles, principles of group movement, varied projects in group acting, application of principles in departmental productions.

Prerequisite: Speech 113C and/or Speech 123A.



**Speech 123C — Basic Theatre Practice (3-2)** Study and practice in the visual arts of the theatre. Includes an introduction to the following: stagecraft, scene design, lighting, costume design and makeup. Three (3) hours lecture per week, and two (2) hours laboratory per week. Additional work on technical crews to provide practical experience.

**Speech 123D — Introduction to Radio and Television Communication (2-4)** A study of the principles of radio and television speaking, including the preparation of commercials, news and program continuity. History, development and regulation of the broadcasting industry as a mass medium and social force. Practical experience operating control board and turntables in practice studio. Field trips to radio and television stations. Two lectures and four laboratory hours per week.

Prerequisite: Speech 113A or consent of instructor.

**Speech 113G — Developmental Speech (3-0)** A course for the improvement of oral communications. Review of fundamentals. Development of speaking techniques. Remedial exercises.

**Speech 213A — Survey of the Theatre (3-0)** An introductory study of the history, art and aesthetics of drama, including an elementary consideration of plays and playwriting; the techniques and styles of acting and directing; present day production techniques and theaters.

Prerequisite: Sophomore standing or consent of instructor.

**Speech 223A — Business and Professional Speaking (3-0)** Special types and techniques of speeches most common to business and professional people; theory and practice in business speech situations, personal conferences, oral reports, sales talks and occasional speeches.

**Speech 223B — Introduction to Speech Correction and Audiology (3-0)** An introduction to the study of the disorders of speech and hearing; types of disorders, causes, diagnosis and therapy methods used for correction.

Prerequisite: Sophomore standing.

## Surveying

**Surveying 113 — Introduction to Surveying (3-0)** Definition of surveying; importance of and brief history; types of surveying and present status of the profession. The theory of measurements and errors, to include definitions of mistakes and errors, rounding off figures, significant figures, and accuracy and precision. Elementary basic methods of surveying computations. Must be taken concurrently with Surveying 113A.

**Surveying 113A — Surveying Measurements Practice (2-5)** Use and care of the 100-foot steel tape and engineer's level. Elementary field exercises in pacing and chaining (horizontal linear distance measuring) and leveling (vertical distance measuring). Instructions in sighting, signaling, and reading and setting verniers. Proper procedures of taking field data and recording same in surveying field notebooks using Reinhardt system of lettering. Must be taken concurrently with Surveying 113.

**Surveying 123 — Land Surveying (3-0)** Brief land history of Texas to include the disposition of the public domain; surveying in Texas; surveying the public lands of the United States. More advanced methods of computations to include the use of basic trigonometry functions in calculating land areas by the "double meridian distance" method, and also the use of basic analytic geometry in calculating land areas by coordinates. Must be taken concurrently with Surveying 123A.

**Surveying 123A — Land Surveying Practice (2-5)** Field Exercises using the transit theodolite. Establishing and referencing monuments; turning and reading horizontal and vertical angles; the theory of the compass and magnetic declination; traversing using bearings, azimuths and deflection angles; and recording in surveying field notebooks. Must be taken concurrently with Surveying 123.

**Surveying 213 — Topographic Surveying and Mapping (3-0)** Definition and uses of the plane table and associated methods to include traversing, radiation, intersection, and resection; mapping and contouring; map projections; the Texas Coordinate System; basic field astronomy; and determination of meridian. Must be taken concurrently with Surveying 213A.

**Surveying 213A — Field Mapping Practice (2-5)** The actual accomplishment of planimetric and topographic maps in the field;

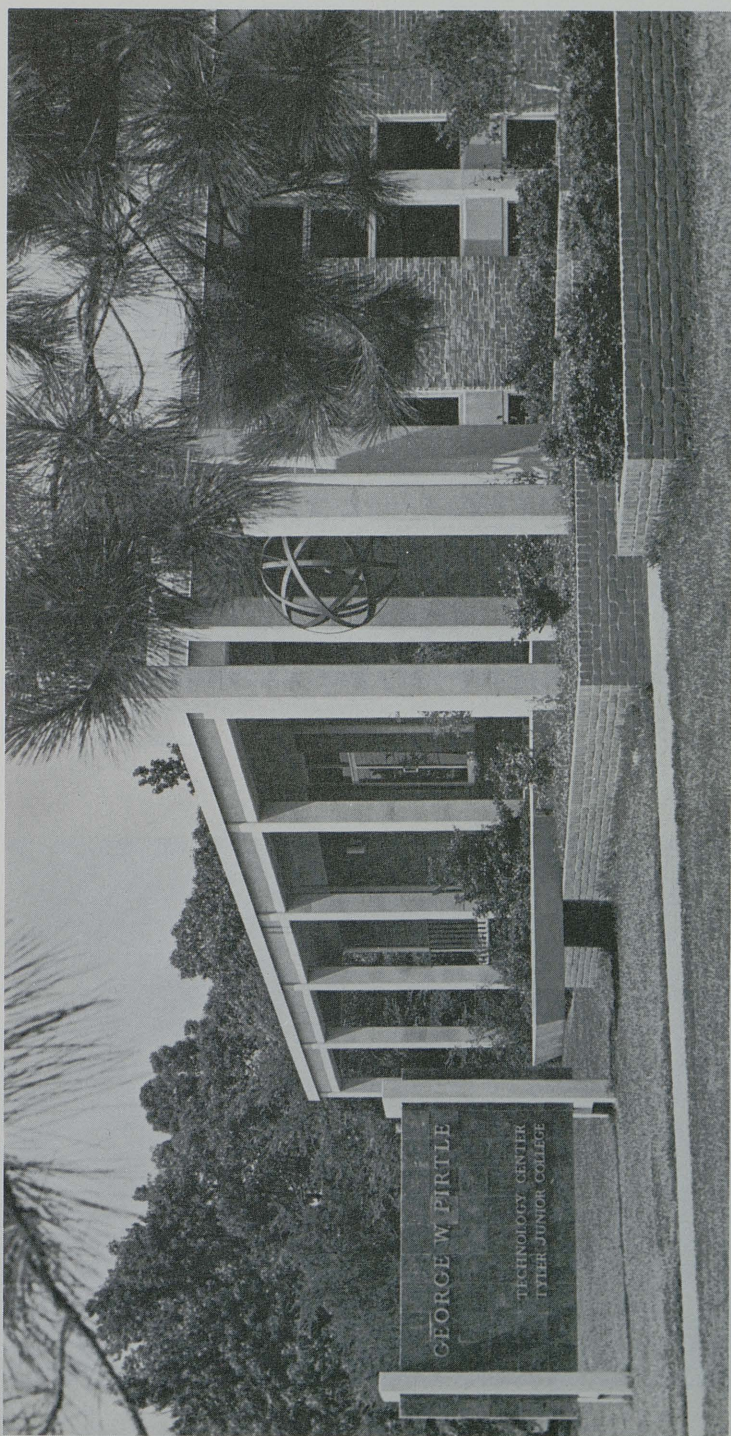


a brief consideration of dendrology and photogrammetry; and the requirements of subdivisions and the platting and filing of same. Must be taken concurrently with Surveying 213.

**Surveying 223 — Route Surveying (3-0)** Transportation systems to include office plans and field and aerial requirements for same; computations of horizontal circular curves and vertical parabolic curves; grades and cross-sections; plan-profile sheets; and earthwork estimates. Must be taken concurrently with Surveying 223A.

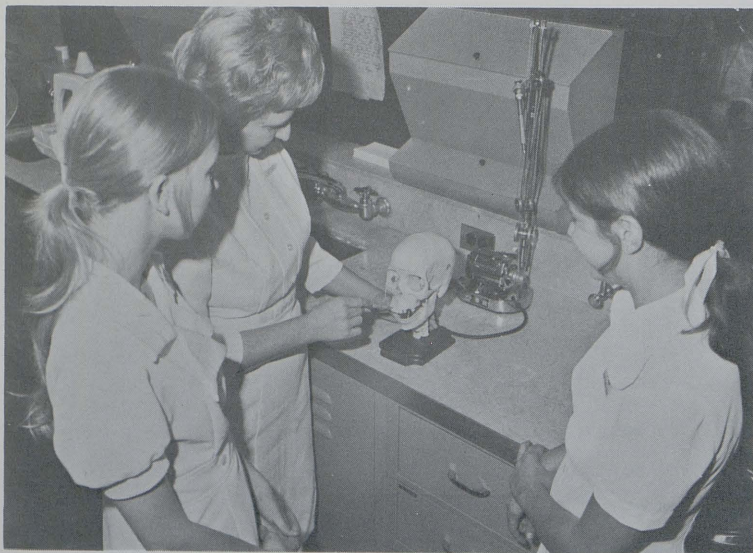
**Surveying 223A — Route Surveying Practice (1-4)** Field exercises to include the reconnaissance survey, preliminary survey, and location survey; centerline traverse and profile levels; right angle locations and cross-section construction stake setting; staking horizontal curves; and calculating cuts and fills and earthwork. Must be taken concurrently with Surveying 223.

**Surveying 223B — Legal Principles of Boundary Location (3-0)** Systems used to describe property; ownership and transfer of real property; locating sequence and simultaneous conveyances; reversion rights; riparial and littoral ownerships; the surveyor in court; and Texas land law questions and answers.



GEORGE W. PIRTLE TECHNOLOGY CENTER





## **THE OCCUPATIONAL EDUCATION DIVISION**

### **GENERAL PROGRAM OFFERINGS**

The Tyler Junior College Occupational Education Department offers complete two-year preparatory programs in the technical, industrial, office, distributive, and allied health occupations. Successful completion of them leads to an Associate Degree. Many of the courses in these programs are available in the Evening College Division.

### **ADULT EDUCATION CLASSES**

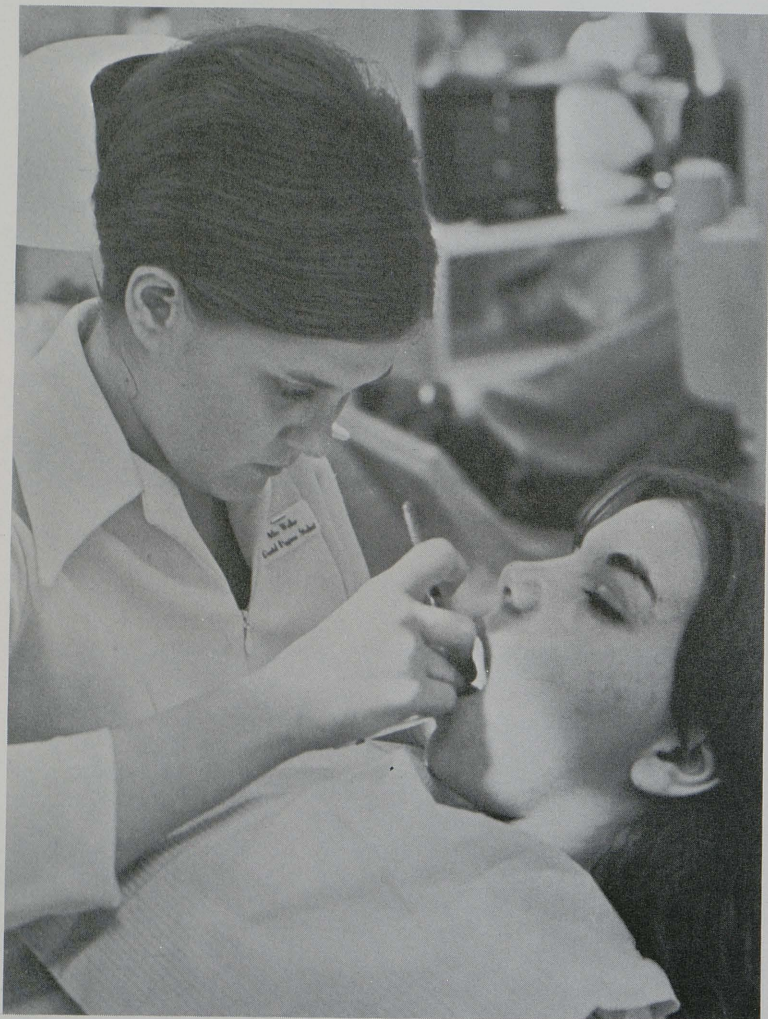
In addition to the complete two-year degree programs, Tyler Junior College, in cooperation with the Texas Education Agency, offers supplemental, apprentice, and in-service short-term preparatory courses.

### **TUITION**

#### **Occupational Educational Department**

All tuition is based upon the per semester hour charge according to residence as listed on pages 35-37 of this catalogue. Special fees will also be found here.





## **Allied Health Occupations Dental Assistant Technology**

The Dental Assistant Program is a two-semester curriculum which starts each year in the fall semester only. It is open to applicants who meet college admission requirements and are selected by an Admissions Committee of the Program. Students transferring from another institution or from another college must have a C average. On satisfactory completion of the program the student is awarded a Certificate of Proficiency in Dental Assisting.

Dental assistants are auxiliary personnel to the dental profession. This program provides the student with an understanding of the function of the dental assistant on the dental health team. It familiarizes the student with the basic qualities desired in an ideal dental assistant and provides the student with specific information relative to the development and growth of teeth, anatomy of the face and head, oral hygiene and oral diseases. The student is taught proper methods of office management, chair assisting, dental radiology, dental laboratory techniques and sterilization and the knowledge and skills required to qualify for the national certification examination sponsored by the American Dental Assistants Association. Individuals trained as dental assistants can be employed immediately on completion of their education. Licensure is not required.

Each year the class is limited to 20 students due to limited teaching facilities. The Admissions Committee selects the class on the basis of high school records, ACTP results and a personal interview.

### **DENTAL ASSISTANT CURRICULUM**

#### **First Semester**

- English 113 — Composition and Rhetoric
- Dental Assisting 112 — Orientation
- Dental Assisting 113 — Introductory Dental Science
- Dental Assisting 112A — Principles of Dental Assisting
- Dental Assisting 113A — Dental Anatomy
- Approved Elective \*

#### **Second Semester**

- English 223B — Technical Report Writing
- Dental Assisting 123 — Oral Anatomy
- Dental Assisting 123A — Advanced Dental Science
- Dental Assisting 123B — Practicum in Dental Assisting
- Home Economics 123C — Nutrition

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\* Approved Electives: Psychology 213, Sociology 213, Speech 113A



## Dental Hygiene

This program provides a two-year course of theoretical and professional training at the college level, leading to the degree of Associate-in-Science in Dental Hygiene and to the State and National Board examinations for registry.

The student engages in occupational training to perform ancillary clinical services contributing to the maintenance of good oral health. Skills are developed to provide the dentist with the aid which will allow him more time for the treatment of patients. The student will develop a sense of personal responsibility to the dental profession and society.

Students desiring admission to the Dental Hygiene program should address inquiries to the Director, Dental Hygiene Program, Tyler Junior College.

### DENTAL HYGIENE CURRICULUM

#### First Year — First Semester

Dental Hygiene 113 — Oral Anatomy and Physiology  
Dental Hygiene 113A — Oral Histology and Embryology  
Dental Hygiene 115 — Dental Hygiene Technique  
Biology 113B — Anatomy and Physiology  
Chemistry 113D — Elementary Chemistry

#### First Year — Second Semester

Dental Hygiene 122 — Periodontology  
Dental Hygiene 122A — General Pathology  
Dental Hygiene 122D — Dental Hygiene Technique  
Dental Hygiene 122C — Dental Hygiene Clinic  
Biology 123B — Anatomy and Physiology  
Biology 114A — Microbiology

#### First Summer Session

English 113 — Composition and Rhetoric  
Psychology 213 — Introduction to Psychology

#### Second Summer Session

English 123 — Composition and Rhetoric  
Sociology 213 — Introductory Sociology

#### Second Year — First Semester

Dental Hygiene 213 — Dental Hygiene Clinic  
Dental Hygiene 212 — Pharmacology  
Dental Hygiene 212D — Clinical Nutrition  
Dental Hygiene 212A — Oral Pathology  
Dental Hygiene 212B — Dental Materials  
Dental Hygiene 213A — Seminar  
Dental Hygiene 222 — Dental Health Education

**Second Year — Second Semester**

- Dental Hygiene 225 — Dental Specialties
- Dental Hygiene 222A — Ethics, Jurisprudence, Ofc. Mgt.
- Dental Hygiene 223 — Dental Hygiene Clinic
- Speech 113A — Fundamentals of Speech

## **Licensed Vocational Nursing**

Licensed Vocational Nursing offers a curriculum leading to a Certificate of Proficiency. The curriculum is designed to prepare qualified individuals to give direct nursing care to patients of all age groups and to promote development of the individual as a responsible member of society. The graduates of this program are prepared for nursing practice in hospitals, clinics, nursing homes and other health agencies.

The curriculum is one year in length and students who complete the course successfully are eligible for the examination by the state board. Only students who have completed a course of training approved by the State Board of Vocational Nurse Examiners, and who have successfully passed the state licensing examination are authorized to practice as Licensed Vocational Nurses.

The Admissions Committee selects the class on the basis of high school records, tests results and personal interview.

### **LICENSED VOCATIONAL NURSING CURRICULUM**

**First Semester**

- Licensed Vocational Nursing 111 —
  - Personal & Vocational Adjustments I
- Licensed Vocational Nursing 111A — Nutrition
- Licensed Vocational Nursing 111B —
  - Mental Health & Mental Illness
- Licensed Vocational Nursing 112 — Clinical Experience I
- Licensed Vocational Nursing 113 — Anatomy
- Licensed Vocational Nursing 113A — Pharmacology
- Licensed Vocational Nursing 113B —
  - Maternity and Newborn Nursing
- Licensed Vocational Nursing 113C —
  - Disease Control & Prevention, Vocational Skills



**Second Semester**

Licensed Vocational Nursing 122 —

Pediatrics, Normal Growth & Development

Licensed Vocational Nursing 121 — Geriatrics & First Aid

Licensed Vocational Nursing 126 — Medical-Surgical I

Licensed Vocational Nursing 124 — Clinical Experience II

**Summer Semester**

Licensed Vocational Nursing 133 —

Medical-Surgical & Personal-Vocational Adjustments II

Licensed Vocational Nursing 139 — Clinical Experience III



## Medical Laboratory Technology

This two-year Associate-in-Applied-Science Degree Medical Laboratory Technician program is designed to prepare people for employment in hospital laboratories and private medical clinics.

The first nine months of the curriculum are devoted largely to liberal arts studies on the junior college campus. In addition to liberal arts studies in the third and fourth semesters, courses are included to provide supervised clinical laboratory work experience in hospitals and clinics.

Four summer sessions of six weeks each are scheduled in the program. Students will be employed full time in medical laboratories during these sessions to gain additional knowledge and skills first-hand. They will be under the general supervision of a program coordinator employed by Tyler Junior College. Group lectures to enrich the learning processes of the students will be provided.

### MEDICAL LABORATORY CURRICULUM

#### First Year — First Semester

English 113 — Composition and Rhetoric  
Mathematics 113E — Applied Mathematics  
Biology 114 — Animal Biology  
Medical 113 — Basic for Allied Health Service  
Biology 114A — Microbiology

#### First Year — Second Semester

English 223B — Technical Report Writing  
Chemistry 114 — General Chemistry  
Mathematics 113 — Algebra  
Medical 123 — Clinical Microbiology  
Biology 124 — Animal Biology

#### First Summer Session

Medical 113S — Clinical Practice I

#### Second Summer Session

Medical 123S — Clinical Practice II

#### Second Year — First Semester

Medical 213C — Clinical Chemistry  
Medical 213 — Clinical Practice  
Chemistry 124 — General Chemistry  
Medical 213A — Medical Laboratory Techniques I  
Biology 113B — Anatomy and Physiology



**Second Year — Second Semester**

Psychology 213 — Introductory Psychology  
Medical 223 — Clinical Practice (MLT)  
Medical 223A — Medical Laboratory Techniques II  
Biology 123B — Anatomy and Physiology  
Approved Elective \*

**First Summer Session**

Medical 213S — Clinical Practice I

**Second Summer Session**

Medical 223S — Clinical Practice II

## Medical Record Technology

This two-year program leads to the Associate-in-Applied-Science Degree. The medical record technician is responsible for many aspects of preparing, analyzing, and preserving the health information needed by patients, hospitals, physicians, public health officials, and research institutions. Graduates will find employment in hospitals, clinics, or nursing homes.

The program of study includes general education courses, as well as specialized medical records courses. In addition to course work, the student will receive practical experience by working in the medical records room of a local hospital for three semesters.

Graduates of this program will be eligible to take a national accrediting examination the September following graduation.

### MEDICAL RECORD CURRICULUM

**First Year — First Semester**

English 113 — Composition and Rhetoric  
Business Administration 123T — Intermediate Typing  
Medical Record 113 — Medical Terminology I  
Medical Record 113A — Medical Record Science  
Elective —

**First Year — Second Semester**

English 123 — Composition and Rhetoric  
Medical Record 123 — Medical Terminology II  
Medical Record 123A — Human Relations and Personnel Problems  
Medical Record 123B — Medical Record Science  
Medical Record 123C — Directed Practice

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\* Approved Electives: Sociology 213, Home Economics 123C

**Second Year — First Semester**

Biology 113B — Anatomy and Physiology  
Medical Record 213 — Directed Practice  
Medical Record 213A — Medical Machine Transcription  
Medical Record 213B — Legal Aspects of Medical Records  
Government 213 — American Government

**Second Year — Second Semester**

Biology 123B — Anatomy and Physiology  
Medical Record 224 — Directed Practice  
Medical Record 223 — Seminar  
Electronic Data Processing 123C — Management Computer  
Government 223 — American State Government

## **Nursing Home Administration**

This program provides a two-year course of theoretical and professional training at the college level, leading to the degree of Associate-in-Applied Science in Nursing Home Administration. The curriculum is so designed that upon successful completion the state license requirements regarding the associate degree will have been met.

Students will be able to provide leadership in therapeutic recreation as well as mastering subject matter pertaining to legal, physical, and financial management needed to succeed as a nursing home administrator.

### **NURSING HOME ADMINISTRATION CURRICULUM**

**First Year — First Semester**

English 113 — Composition and Rhetoric  
Speech 223A — Business and professional speaking  
Nursing Home Administration 113 —  
    Introduction to Nursing Home Administration  
Nursing Home Administration 113A —  
    Psychology of Patient Care  
Approved Elective \*

**First Year — Second Semester**

Business Administration 214 — Principles of Accounting  
Recreation Leadership 213 — Group Leadership  
Nursing Home Administration 123 —  
    Technology of Patient Care  
Nursing Home Administration 123A —  
    Nursing Home Administration Law  
Approved Elective \*



**Second Year — First Semester**

Government 213 — American Government  
Nursing Home Administration 216 —  
    Nursing Home Internship I (with seminar)  
Nursing Home Administration 213A —  
    Financial Management of the Nursing Home  
Approved Elective \*

**Second Year — Second Semester**

Psychology 213 — Introduction to Psychology  
Nursing Home Administration 226 — Nursing Home Administration Internship II (with seminar)  
Nursing Home Administration 223A —  
    Nutrition and Quantity Foods  
Approved Elective \*

## Radiologic Technology

Tyler Junior College offers a cooperative program with Medical Center Hospital and Mother Frances Hospital designed to provide understanding, proficiency and skill in Radiologic Technology.

Upon completion of the program the student will be granted an Associate-in-Applied-Science Degree and will be eligible to apply for certification by the American Registry of Radiologic Technologists.

A balanced curriculum of general didactic and clinical courses offers the student an opportunity for cultural development as well as occupational competence. Clinical instruction is given at Medical Center Hospital and Mother Frances Hospital under the direction of Radiologists, technical directors of the Radiology Departments, and clinical instructors. The didactic courses will be held on the Tyler Junior College campus.

Upon completion of the program the students should be able to make application of the material in the darkroom, the radiographic rooms and the fluoroscopic rooms. The duration of the program will be a minimum of twenty-four months. A minimum grade of 75 will be required on all Radiologic Technology courses.

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\* Approved Electives: English 223B — Technical Report Writing, Business Administration 113D — Business Mathematics, Government 223 — American State Government, Sociology 213 — Introduction to Sociology, Mid-Management 113B — Principles of Management, History 213 — History of the United States, History 223 — History of the United States

**RADIOLOGIC TECHNOLOGY CURRICULUM****First Year — First Semester**

English 113 — Composition and Rhetoric  
Radiologic Technology 111 — Nursing Procedures  
Radiologic Technology 112 — Clinical Practice I  
Radiologic Technology 113 — Radiologic Technology I  
Radiologic Technology 113A — Radiologic Physics I  
Radiologic Technology 113B — Anatomy and Physiology

**First Year — Second Semester**

English 223B — Technical Report Writing  
Radiologic Technology 123 — Radiologic Physics II  
Radiologic Technology 123A — Radiologic Technology II  
Radiologic Technology 123B — Basic Related Science I  
Radiologic Technology 123C — Clinical Practice II

**First Summer Session**

Radiologic Technology 113S — Clinical Practice III

**Second Summer Session**

Radiologic Technology 123S — Clinical Practice IV

**Second Year — First Semester**

Radiologic Technology 213 — Clinical Practice V  
Radiologic Technology 213A — Basic Related Science II  
Radiologic Technology 213C — Radiologic Technology III  
Psychology 213 — Introductory Psychology  
Approved Elective \*

**Second Year — Second Semester**

Radiologic Technology 223 — Clinical Practice VI  
Radiologic Technology 223A — Radiologic Technology IV  
Radiologic Technology 223B — Basic Related Science III  
Approved Elective \*  
Approved Elective \*

**Second Year Summer Session**

Radiologic Technology 213S — Clinical Practice VII

**Second Year Summer Session**

Radiologic Technology 223S — Clinical Practice VIII

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\* Approved Electives: Sociology 213, Speech 223A, Government, Business Administration 113T



## Respiratory Therapy Technology

The two-year program leading to an Associate-in-Applied Science Degree in Respiratory Therapy prepares students for a paramedical specialty in the clinical management of respiratory disease. The respiratory therapist works under physician direction with other paramedical specialists and nurses in a hospital or institutional environment where multiple disciplines are necessary in the care of patients with respiratory distress or disease.

The didactic courses which are conducted on the campus, emphasize the background courses necessary for an education in paramedical science, i.e., biology, mathematics, physics, chemistry, english, and psychology. Respiratory courses consist of both classroom lectures and supervised laboratory-clinical practice.

The School of Respiratory Therapy has received "Preliminary Approval" from the Joint Review Committee on Respiratory Therapy Education, and thus graduates of the school at present meet the educational requirements of the American Registry of Inhalation Therapist for eligibility to take the national registry exams.

### RESPIRATORY THERAPY CURRICULUM

#### First Year — First Semester

English 113 — Composition and Rhetoric  
Biology 113B — Anatomy and Physiology  
Mathematics 113E\* — Applied Mathematics  
Physics 113 — Physics Problems  
Respiratory Therapy 113 — Respiratory Therapy Orientation

#### First Year — Second Semester

English 223B — Technical Report Writing  
Psychology 223 — Applied Psychology  
Biology 123B — Anatomy and Physiology  
Respiratory Therapy 123 — Basic Technology  
Respiratory Therapy 123A — Clinical Laboratory I

#### First Year — Summer Session — First Term

Respiratory Therapy 113S — Clinical Practice I

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Possible elective by individual arrangement.

**First Year — Summer Session — Second Term**

Respiratory Therapy 123S — Clinical Practice II

**Second Year — First Semester**

Respiratory Therapy 213 — Clinical Topics I

Chemistry 113N — Introduction To Inorganic Chemistry

Respiratory Therapy 213A — Clinical Application

Respiratory Therapy 213B — Advanced Technology I

Respiratory Therapy 213C — Clinical Topics II

**Second Year — Second Semester**

Chemistry 123N\*\* — Introduction to Organic and Physiologic Chemistry

Respiratory Therapy 223 — Management Topics

Respiratory Therapy 223A — Clinical Application

Respiratory Therapy 223B — Advanced Technology II

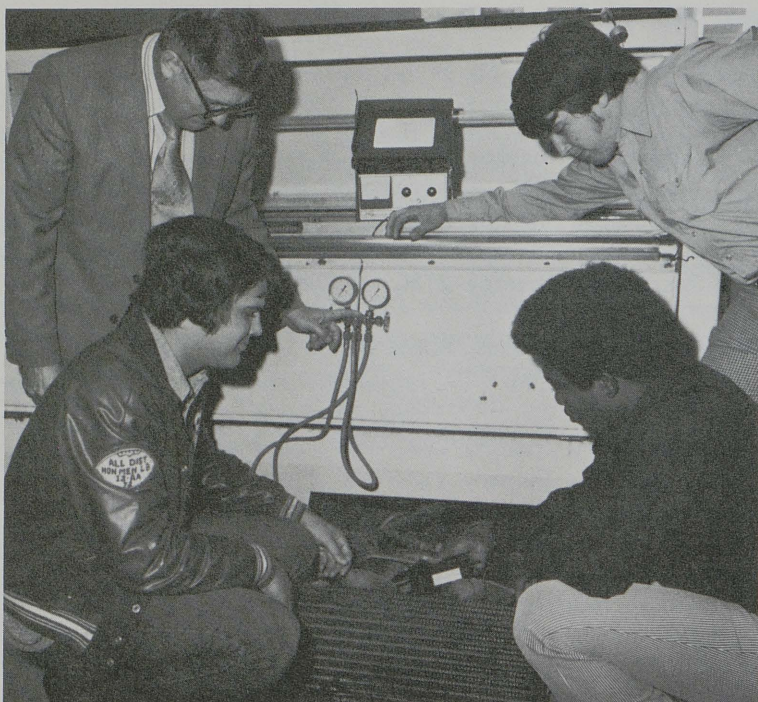
Respiratory Therapy 223C — Clinical Practice III

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Possible elective by individual arrangement.







## **Industrial Technological Programs**

### **Air Conditioning and Refrigeration**

Students successfully completing this program receive the Associate-in-Applied Science Degree.

The curriculum is designed to prepare the student to assist in planning, installing, operating and maintaining air conditioning equipment. The required technical information is presented and related skills are developed which will enable the graduate to function efficiently when working with engineers, system designers, skilled craftsmen, salesmen, and others in the field.

Students in this program are required to furnish their own hand tools for use in laboratory classes.

#### **AIR CONDITIONING AND REFRIGERATION CURRICULUM**

##### **First Year — First Semester**

English 113 — Composition and Rhetoric

Mathematics 113\* — College Algebra

Air Conditioning 113A — Fundamentals of Refrigeration

Air Conditioning 113D — Fundamentals of Electricity

Approved Elective \*\*

Approved Elective \*

##### **First Year — Second Semester**

English 223B — Technical Report Writing

Mathematics 113T\* — Trigonometry

Air Conditioning 113B — Blueprint Reading

Air Conditioning 123A — Refrigeration Machines

Air Conditioning 123D — Automatic Controls

##### **Second Year — First Semester**

Physics 113 — Elementary Physics

Air Conditioning 213 — Commercial Refrigeration Systems

Air Conditioning 213A — Heating

Business Administration 113B — Introduction to Business

Approved Elective \*\*

##### **Second Year — Second Semester**

Business Administration 213L — Business Law

Air Conditioning 223 — Air Conditioning Principles

Air Conditioning 223A — Related Problems - Systems

Approved Elective \*\*                      Design

Approved Elective \*\*

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: Business Administration 113A, Mid-Management 223B (Introduction to Public Relation), History, Government, Mid-Management 113B (Principles of Management)



## Drafting Technology

The curriculum in Drafting is designed to qualify the student for professional work in the many areas of drafting. Upon completion of the required two-year plan, he receives an Associate-in-Applied-Science Degree.

### DRAFTING CURRICULUM

#### First Year — First Semester

Drafting 113A — Engineering Drawing  
Drafting 113B — Freehand Drawing  
Drafting 223A — Manufacturing Design, Materials & Processing  
English 113 — Composition and Rhetoric  
Mathematics 113E\* — Applied Mathematics I  
Psychology 111  
Physical Education 111

#### First Year — Second Semester

Drafting 123A — Architectural Drawing  
Drafting 123B — Mechanical Drawing  
Drafting 213D — Descriptive Geometry  
English 223B — Technical Report Writing  
Mathematics 123E\* — Applied Mathematics II  
Physical Education 121

#### Second Year — First Semester

Drafting 213P — Pipe Drafting  
Drafting 223S — Structural Drafting  
Mathematics 113B\* — Trigonometry  
Physics 113 — Elementary Physics  
Approved Elective \*\*

#### Second Year — Second Semester

Drafting 223B — Map Drafting  
Drafting 223C — Plane Surveying  
Drafting 223E — Electronic Drafting  
Speech 223A — Business and Professional Speaking  
Approved Elective \*\*

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: History, Government, Mid-Management 113C (Human Relations in Management), Surveying 223B (Legal Principles of Boundary Location)

## Electronics Technology

The Electronics program, completed in two college years, prepares the student for entry into the Electronics Industry as a specialist technician, or as an Engineer Assistant, to work in the field of research and development, or to service and maintain communication equipment. He is qualified to do calibration and adjustment of automatic control equipment. Upon successful completion of the following program the Associate-in-Applied Science degree is granted.

### ELECTRONICS CURRICULUM

#### First Year — First Semester

Electronics 113 — DC and AC Theory and Circuits  
Electronics 113L — Basic Electricity Laboratory  
Electronics 113M — Elementary Circuit Analysis  
English 113 — Composition and Rhetoric  
Mathematics 113E\* — Applied Mathematics I  
Approved Elective \*\*

#### First Year — Second Semester

Electronics 123 — Industrial Electronics  
Electronics 123A — Power Distribution  
Electronics 123L — Basic Electronics Laboratory  
Electronics 123M — Advanced Circuit Analysis  
English 223B — Technical Report Writing  
Approved Elective \*\*

#### Second Year — First Semester

Electronics 213A — Digital Computer Fundamentals  
Electronics 213B — Semi-Conductors I  
Electronics 213C — Semi-Conductors Laboratory I  
Engineering 112 — Engineering Drawing  
Physics 113 — Elementary Physics  
Approved Electives \*\*

#### Second Year — Second Semester

Electronics 223 — Industrial Instrumentation Fundamentals  
Electronics 223B — Semi-Conductors II  
Electronics 223C — Semi-Conductors Laboratory II  
Mathematics 113B\* — Trigonometry  
Speech 223A — Business and Professional Speaking  
Approved Elective \*\*

Electronic Cooperative students will complete Electronics 123D, 123B, 123C, and 123E during Summer Sessions.

\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: History, Government, Drafting 223E, Mid-Management 223B



## Electronic Data Processing

The College offers one and two year data processing programs.

The nine months program prepares the student to qualify for employment in the field of automatic data processing. The curriculum centers around the operation and control of data processing machines, including programming the electronic digital computer.

A certificate of proficiency is granted upon successful completion of the course.

The two year program leads to the Associate in Applied Science Degree in Electronic Data Processing and emphasizes mastery of the electronic digital computer.

A \$15.00 per semester rental fee is charged any student taking one or more laboratory courses.

### ELECTRONIC DATA PROCESSING CURRICULUM

#### First Year — First Semester

- English 1113 — Composition and Rhetoric
- Business Administration 113B — Introduction to Business
- Business Administration 113A — Elementary Accounting
- Electronic Data Processing 113A —
  - Introduction to Computer
- Electronic Data Processing 113B —
  - Elementary Programming

#### First Year — Second Semester

- English 223B — Technical Report Writing
- Electronic Data Processing 123A —
  - Intermediate Programming
- Electronic Data Processing 123B —
  - Computer Operating Systems
- Electronic Data Processing 123C —
  - Management Computer Use
- Business Administration 123A — Elementary Accounting

**Second Year — First Semester**

- Electronic Data Processing 213A —  
Advanced Programming
- Electronic Data Processing 213B —  
Systems and Procedures I
- Electronic Data Processing 213C —  
Advanced Assembly Programming
- Approved Elective \*
- Approved Elective \*

**Second Year — Second Semester**

- Electronic Data Processing 223A —  
Systems Programming
- Electronic Data Processing 223B —  
Systems and Procedures II
- Electronic Data Processing 223C —  
Computer Language I
- Approved Elective \*

## Farm and Ranch Management

Many of the agriculture operations in the East Texas area are a combination of farming and ranching. This two-year program is designed for the student who is interested in farming and ranching or agricultural-business as a career.

Both technical knowledge and management skills will be emphasized to prepare the graduate for a career in farm and ranch management, agriculture sales, agriculture marketing, or agricultural management.

Students successfully completing this two-year program are awarded the Associate-in-Applied Science Degree.

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\* Approved Electives: Business Administration 213L — Business Law, Economics 213 — Principles of Economics, Mid-Management 113B — Principles of Management, Speech 223A — Business and Professional Speaking, History, Government



**FARM AND RANCH MANAGEMENT CURRICULUM****First Year — First Semester**

Ranch Management 113 — Principles of Soil Management  
Ranch Management 113A —  
    Principles of Animal Husbandry  
Ranch Management 113B — Principles of Agri-Business  
English 113 — Composition and Rhetoric  
Mathematics 113E — Applied Math

**First Year — Second Semester**

Ranch Management 123A —  
    Agriculture Economics and Finance  
Ranch Management 123B —  
    Principles of Ranch Management  
Ranch Management 123C — Principles of Horse Husbandry  
Real Estate Management 123B — Real Estate Appraisal  
Speech 223A — Business and Professional Speaking

**Summer Session — First Six Weeks**

Ranch Management 116S — Ranch Training On-the-Job

**Second Year — First Semester**

Ranch Management 213 — Principles of Agriculture Sales  
Ranch Management 213A —  
    Livestock Rations and Application  
Ranch Management 214 — Farm Shop  
Business Administration 123A — Elementary Accounting  
Business Administration 113T — Typewriting

**Second Year — Second Semester**

Ranch Management 223A — Farm and Ranch Records  
Ranch Management 223C —  
    Principles of Agricultural Marketing  
Ranch Management 223D —  
    Principles of Agricultural Marketing  
Approved Elective \*  
Approved Elective \*

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\* Approved Electives: Biology 114, Biology 124B, Government, History, Psychology 223, Sociology 213

## Fire Protection Technology

This two-year program leads to the Associate-in-Applied Science Degree in Fire Protection Technology and is in accordance with public law and sets forth approved or certified courses as approved by the Commission on Fire Protection. This Commission is composed of representatives of the Texas Education Agency and the Coordinating Board.

### FIRE PROTECTION TECHNOLOGY CURRICULUM

#### First Year — First Semester

Fire Protection 113 — Fundamentals of Fire Protection  
Fire Protection 113A — Industrial Fire Protection I  
English 113 — Composition & Rhetoric  
Chemistry 113 — Introductory Chemistry  
Mathematics 113E \* — Applied Mathematics

#### First Year — Second Semester

Fire Protection 123 — Fire Protection Systems  
Fire Protection 123A — Fire Prevention  
Fire Protection 123B — Industrial Fire Protection II  
Speech 223A — Business and Professional Speaking  
Chemistry 123 — Introductory Chemistry

#### Second Year — First Semester

Fire Protection 213 — Fire Administration I  
Fire Protection 213A — Building Codes and Construction  
Fire Protection 213B — Building Codes and Construction  
English 223B — Technical Report Writing  
Government 223 — American State Government  
Approved Elective \*\*

#### Second Year — Second Semester

Fire Protection 223 — Hazardous Materials I  
Fire Protection 223A — Fire Administration II  
Fire Protection 224B — Fire Fighting Tactics and Strategy  
Approved Elective \*\*  
Free Elective \*\*\*  
Free Elective \*\*\*

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: FIR 113B — Fire Safety Education, FIR 113C — Advanced Fire Loss Statistical Systems, FIR 113D — Fire Insurance Fundamentals, FIR 113E — Legal Aspects of Fire Protection, FIR 113F — Fire Service Communications, FIR 113G — Urban Fire Problem Analysis, FIR 223C — Hazardous Materials II

\*\*\* Free Electives: History 213, 223; Government 213, Psychology 213, Mathematics 113\*



## Graphic Communications

Students successfully completing this program receive the Associate-in-Applied Science Degree.

This is a two year post high school technical program designed to meet the needs of the student desiring to enter the field of Communications Graphics and Commercial Photography. The course of study is designed to give the student a well rounded knowledge of Illustration, Communications Graphics, and Commercial Photography used in Advertising and Photography fields.

### GRAPHIC COMMUNICATIONS CURRICULUM

#### First Year — First Semester

Graphic Communications 113 — Basic Photography  
Graphic Communications 113A — Basic Graphics  
English 113 — Composition and Rhetoric  
Mathematics 113 \* —  
College Algebra or Mathematics 113E  
Approved Elective \*\*

#### First Year — Second Semester

Graphic Communications 123 — Advanced Photography  
Graphic Communications 123B —  
Reproduction Layout and Design  
English 223B — Technical Report Writing  
Mathematics 113T \* — Applied Trigonometry or Math 123E  
Approved Elective \*\*

#### Second Year — First Semester

Graphic Communications 213 — Commercial Photography  
Graphic Communications 213A —  
Photographic Reproduction  
Speech 223A — Business and Professional Speaking  
Approved Elective \*\*  
Approved Elective \*\*

#### Second Year — Second Semester

Graphic Communications 223 — Studio Photography  
Graphic Communications 223A — Graphic Reproduction  
Psychology 223 — Applied Psychology  
Approved Elective \*\*  
Approved Elective \*\*

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: History, Government, Art 113, Chemistry 114, Psychology 113, Mid-Management 223B

## Law Enforcement Technology

Students successfully completing this program receive the Associate-in-Applied-Science Degree.

This course provides a survey of police problems, crime trends and statistics, organization and jurisdiction of local, state and federal enforcement agencies. Surveys of professional opportunities and personal qualifications are studied. The course is a basic orientation designed to provide the student with a complete evaluation of the European and American police systems. The student is introduced to a general history of police systems which serves as a frame of reference in analyzing trends in the modern police service.

### LAW ENFORCEMENT CURRICULUM

#### First Year — First Semester

English 113 — Composition and Rhetoric  
History 213 — History of the United States  
Law Enforcement 113 — Introduction to Law Enforcement  
Law Enforcement 113B — Police Organization and  
Administration  
Elective \*\*

#### First Year — Second Semester

History 223 — History of the United States  
English 223B — Technical Report Writing  
Speech 223A — Business and Professional Speaking  
Law Enforcement 123B — Police Role in Crime and  
Delinquency  
Law Enforcement 123C\* — Patrol Administration

#### Second Year — First Semester

Psychology 213 — Introduction to Psychology  
Government 213 — American Government  
Sociology 213 — Introduction to Sociology  
Law Enforcement 213A — Criminal Investigation  
Law Enforcement 213B — Legal Aspects of Law Enforcement  
Law Enforcement 213D\* — Probation and Parole

#### Second Year — Second Semester

Government 223 — National and State Government  
Sociology 223 — Social Problems  
Law Enforcement 223B\* — Traffic Planning and  
Administration  
Law Enforcement 223C — Criminal Procedure and Evidence  
Law Enforcement 223D — Police Community Relations

\*\* Approved Elective: Graphic Communications 113



## Mid-Management

The Mid-Management program is a cooperative work-study program which leads to an Associate Degree in Applied Science. The Mid-Management curriculum is an accelerated program designed to give selected students the advanced management course needed for managerial skills. Its purpose is to provide a practical, comprehensive program covering the full spectrum of management activity. The program is designed to meet both the requirements of young people preparing for careers in business management as well as men and women who are already actively engaged in business and industry. Structured to provide functional management theory that can be applied immediately to the job, the Mid-Management program supports the theory that there is no substitute for experience in the learning process.

Concurrent with the academic Mid-Management courses, the Mid-Management major is required to take a course called Management Internship. One of the requirements of the management internship course is that a student must work a minimum of 20 hours per week at a training station provided or approved by a Mid-Management coordinator.

Persons desiring to enroll in the Mid-Management program should:

1. Make application for Mid-Management in advance of the fall and spring registration periods.
2. Be counseled by a Mid-Management coordinator.
3. Be placed in an approved Management training station.
4. Obtain a permit to register slip from the Mid-Management coordinator.

Persons who may have an interest in management but who are not interested in the management internship, may enroll for the Mid-Management series on prior approval.

**MID-MANAGEMENT CURRICULUM****(Supermarket Option)****First Year — First Semester**

English 113 — Composition and Rhetoric  
Business Administration 113D — Business Mathematics  
Mid-Management 113D — Principles of Supermarket Re-  
tailing  
Mid-Management 113B — Principles of Management  
Mid-Management 113A\* — Mid-Management Work  
Experience & Seminar

**First Year — Second Semester**

Business Administration 113C — Business Correspondence  
Mid-Management 123D — Principles of Supermarket  
Merchandising  
Mid-Management 123 — Principles of Marketing  
Mid-Management 123A\* — Mid-Management Work  
Experience & Seminar  
Business Administration 113B — Introduction to Business

**Second Year — First Semester**

Psychology 213 — Introduction to Psychology  
Speech 223A — Business and Professional Speaking  
Mid-Management 213B — Personnel Management  
Mid-Management 213C — Introduction to Supermarket  
Management  
Mid-Management 213A\* — Mid-Management Work  
Experience & Seminar

**Second Year — Second Semester**

Electronic Data Processing 123C — Management Computer  
Use  
Mid-Management 223B — Introduction to Public Relations  
Mid-Management 223C — Principles of Supermarket  
Operation  
Mid-Management 223 — Salesmanship  
Mid-Management 223A\* — Mid-Management Work  
Experience & Seminar

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\* Mid-Management Internship includes twenty hours of supervised work experience each week, with a one-hour related weekly seminar. Students are limited to only one internship course per semester.



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**MID-MANAGEMENT CURRICULUM****(Supervision Option)****First Year — First Semester**

English 113 — Composition and Rhetoric  
Business Administration 113B — Introduction to Business  
Mid-Management 113C — Human Relations in Management  
Mid-Management 113B — Principles of Management  
Mid-Management 113A\* — Mid-Management Work  
Experience & Seminar

**First Year — Second Semester**

Business Administration 113C — Business Correspondence  
Business Administration 113D — Business Mathematics  
Mid-Management 123 — Principles of Marketing  
Mid-Management 123A\* — Mid-Management Work  
Experience & Seminar  
Approved Elective \*\*

**Second Year — First Semester**

Mid-Management 213B — Personnel Management  
Mid-Management 213 — Advertising and Sales Promotion  
Mid-Management 213A\* — Mid-Management Work  
Experience & Seminar  
Business Administration 214 — Principles of Accounting  
Economics 213 — Principles of Economics

**Second Year — Second Semester**

Mid-Management 223 — Salesmanship  
Mid-Management 223B — Introduction to Public Relations  
Mid-Management 223A\* — Mid-Management Work  
Experience & Seminar  
Speech 223A — Business and Professional Speaking  
Approved Elective \*\*

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\* Mid-Management Internship includes twenty hours of supervised work experience each week, with a one-hour related weekly seminar. Students are limited to only one internship course per semester.

\*\* Approved Electives: History, Government, Electronic Data Processing 123C (Management Computer Use), Business Administration 113M (Office Machines), Business Administration 113T (Typewriting)

**MID-MANAGEMENT CURRICULUM****(Banking Option)**

Students completing this two year course of study will receive an Associate-in-Applied Science degree in Mid-Management — Banking Option. The program meets the requirements for American Institute of Banking Basic, Standard, and Advanced certification.

**First Year — First Semester**

English 113 — Composition and Rhetoric  
or Banking 223F — Effective English  
Psychology 213 — Introduction to Psychology  
Business Administration 214 — Principles of Accounting  
Economics 213 — Principles of Economics  
Banking 112 — Orientation to Banking  
Banking 113 — Principles of Bank Operations

**First Year — Second Semester**

Speech 113 — Public Speaking  
Mid-Management 113B — Principles of Management  
Business Administration 113D — Business Mathematics  
Business Administration 224 — Principles of Accounting  
Banking 122 — Loan and Discount  
Banking Elective \* — (3 Semester Hours)

**Summer School — First Session**

Banking 113S — Credit Administration  
Banking Elective \* — (3 Semester Hours)

**Summer School — Second Session**

Banking 123S — Money and Banking  
Banking Elective \* — (3 Semester Hours)

**Second Year — First Semester**

Business Administration 113C — Business Correspondence  
Banking 213 — Bank Investments  
Banking 213A — Bank Management  
Banking 213B — Trust Functions and Services  
Banking 211 — Conference Planning and Leadership  
Approved Elective \*\* — (3 Semester Hours)

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**\* Banking Electives:**

Banking 111 (1 Sem. Hr. Credit)  
Banking 111A (1 Sem. Hr. Credit)  
Banking 111B (1 Sem. Hr. Credit)  
Banking 113A (3 Sem. Hrs. Credit)

Banking 113B (3 Sem. Hrs. Credit)  
Banking 223C (3 Sem. Hrs. Credit)  
Banking 223D (3 Sem. Hrs. Credit)  
Banking 223E (3 Sem. Hrs. Credit)

**\*\* Approved Electives:** Business Administration 113L (3 Sem. Hrs. Credit), Real Estate 123 (3 Sem. Hrs. Credit)



**Second Year — Second Semester**

Government 223 — American State Government  
Mid-Management 123 — Principles of Marketing  
Banking 223 — Installment Credit  
Banking 223A — Analyzing Financial Statements  
Banking 223B — Financing Business Enterprise

## **Ophthalmic Technician and Dispenser**

The curriculum for Ophthalmic Technicians and Dispensers represents a carefully planned balance of theory and practice in all aspects of the profession. The purpose of the program is to prepare the student to apply the science of optics to the making and fitting of lenses and devices to aid in providing comfortable and efficient vision; to prepare the student to measure, adapt, and fit eyeglasses or contact lenses to the human face, for the aid of correction of visual or ocular abnormalities; and to train the student in the use of measuring devices, instruments, machines and hand tools.

Students successfully completing this two-year program are awarded the Associate-in-Applied Science Degree.

### **OPHTHALMIC TECHNICIAN AND DISPENSING CURRICULUM**

**First Year — First Semester**

English 113 — Composition and Rhetoric  
Mathematics 123E — Applied Mathematics  
Physics 113 — Physics Problems I  
Ophthalmic Dispensing 113 — Ophthalmic Materials and  
Lab. I  
Ophthalmic Dispensing 113B — Introduction to Lens and  
Frame Measurements

**First Year — Second Semester**

Ophthalmic Dispensing 123 — Ophthalmic Materials and  
Lab. II  
Ophthalmic Dispensing 123A — Anatomy & Physiology of  
the Eye  
Ophthalmic Dispensing 123B — Principles of Optics I  
Business Administration 113B — Introduction to Business  
Elective

**Summer School — First Term**

Ophthalmic Dispensing 113S — Practicum

**Summer School — Second Term**

Ophthalmic Dispensing 123S — Practicum

**Second Year — First Semester**

Ophthalmic Dispensing 213 — Ophthalmic Materials and  
Lab. III

Ophthalmic Dispensing 213A — Ophthalmic Dispensing I

Ophthalmic Dispensing 213B — Principles of Optics II

Ophthalmic Dispensing 213C — Practicum

**Second Year — Second Semester**

Ophthalmic Dispensing 223 — Contact Lenses

Ophthalmic Dispensing 223A — Ophthalmic Dispensing II

Ophthalmic Dispensing 223B — Special Visual Aids

English 223B — Technical Report Writing

Ophthalmic Dispensing 223C — Practicum

## Petroleum Technology

Students successfully completing this program receive the Associate-in-Applied Science Degree.

The petroleum technology curriculum is established with the advice and co-operation of employers and workers in the oil fields to provide preliminary training for workers in various aspects of petroleum development and production. The oil industry requires employees with training in locating, drilling and maintaining wells, and in handling and refining petroleum products.

While scientific background and related information is included in the technology course, major emphasis is upon operation in the oil field, with opportunity for field trips and for employment.

Petroleum technology majors have available training in four broad areas: exploration, development, marketing, and construction and maintenance. The two-year program listed below is the pattern suggested for students who plan to enter the petroleum industry in the field of exploration and development.

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\* Approved Electives: Principles of Management, History, Salesmanship, Government



**PETROLEUM TECHNOLOGY CURRICULUM****First Year — First Semester**

Petroleum Technology 113 — Petroleum Development  
Petroleum Technology 112A — Rotary Drilling Fluids  
Petroleum Technology 112B — Drilling Equipment Field Lab  
English 113 — Composition and Rhetoric  
Mathematics 113E\* — Applied Mathematics I  
Approved Elective \*\*

**First Year — Second Semester**

Petroleum Technology 121 — Oil Field Records  
Petroleum Technology 123 — Production Methods  
Petroleum Technology 122A — Production Equipment Field Lab  
Drafting 111 — Blueprint Reading  
English 223B — Technical Report Writing  
Mathematics 123E\* — Applied Mathematics II  
Approved Elective \*\*

**Second Year — First Semester**

Petroleum Technology 213 — Introduction to Petroleum Industry  
Petroleum Technology 212A — Well Logging Methods  
Petroleum Technology 213A — Petroleum Laboratory Methods  
Mathematics 113B\* — Trigonometry  
Electronics 113 — Basic Electronics  
Approved Elective \*\*

**Second Year — Second Semester**

Petroleum Technology 222B — Geophysical Methods  
Petroleum Technology 222 — Planetable Surveying for Geophysics  
Petroleum Technology 222A — Natural Gas Production  
Petroleum Technology 222C — Hydraulics for Petroleum Technologists  
Physics 113 — Elementary Physics  
Drafting 223B — Map Drafting  
Approved Elective \*\*

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: Geology 114, Geology 124, Chemistry 114, Chemistry 124, Electronics 123D, History, Government

## Real Estate Management

Students successfully completing this program receive the Associate-in-Applied Science degree.

The curriculum is designed with formal classroom study combined with case studies and actual work experience to give the student a sound educational background for a career in the real estate industry as a real estate salesman, petroleum landman, land title insurance agent, property insurance agent, or a wide variety of other land-oriented careers.

The program provides an opportunity for students to complete the educational requirements for the Texas Real Estate Salesman or Broker's License and/or the Fire and Casualty Local Recording Agent's License.

### REAL ESTATE MANAGEMENT CURRICULUM

#### First Year — First Semester

English 113 — Composition and Rhetoric  
Business Administration 113B — Introduction to Business  
Real Estate Management 113 — Principles of Real Estate  
Real Estate Management 113A — Real Estate Practice I  
Real Estate Management 113B — Introduction to Land  
Records

#### First Year — Second Semester

English 223B — Technical Report Writing  
Business Administration 113D — Business Mathematics  
Real Estate Management 123 — Real Estate Law  
Real Estate Management 123A — Real Estate Finance  
Real Estate Management 123B — Real Estate Appraising  
Real Estate Management 123C — Real Estate Internship \*  
(or Approved Elective) \*\*

#### Second Year — First Semester

Business Administration 113C — Business Correspondence  
Business Administration 113 — Oil and Gas Law  
Real Estate Management 213 — Methods of Land Title  
Investigation  
Business Administration 213L — Business Law  
Real Estate Management 213B — Fire and Casualty I  
(or elective)  
Real Estate Management 213C — Real Estate Internship \*  
(or Approved Elective) \*\*



**Second Year — Second Semester**

- Elective — (Drafting 223B — Map Drafting)
- Speech 223A — Business and Professional Speaking
- Real Estate Management 223 — Property Management I
- Real Estate Management 223A — Real Estate Title Insurance, Abstract, Escrow and Closing Procedures
- Real Estate Management 223B — Real Estate Practice II
- Real Estate Management 223C — Real Estate Internship\*  
(or Approved Elective)\*\*

## Recreation Leadership

Students successfully completing this program receive the Associate-in-Applied Science degree.

The objectives of the Recreation Leadership Department are:

To present subject matter which will enable the student to acquire basic knowledge and understanding necessary to program, organize and supervise a recreation program.

To offer the student a functionally unified educational program, with exposure to both theoretical principles and clinical experience and a range of elective specialization possibilities.

To assist the student to develop attitudes for effective relationships with program participants, co-workers and supervisors.

To motivate students and help them to realize self-satisfaction and a sense of achievement in their own lives.

It is the ultimate goal of the Recreation Leadership Department to stimulate the personal growth of each student and to elevate the standards of the recreation profession as a service to humanity.

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\* Real Estate Internship includes twenty hours of supervised work experience each week with a one-hour related weekly seminar. Students are limited to only one internship course per semester and it cannot be taken alone.

\*\* Approved Electives: Agriculture 113G — Landscaping, Agriculture 123G — Floriculture, Business Administration 113A — Elementary Accounting, Business Administration 123A — Elementary Accounting, Home Economics 124, Mid-Management 223, Petroleum Technology 121, Farm and Ranch Management 123A

The Recreation Leadership Department provides the opportunity for students to complete the educational and clinical requirements for professional certification with either: National Parks and Recreation Association, National Therapeutic Recreation Society or American Camping Association.

### **RECREATION LEADERSHIP CURRICULUM**

#### **First Year — First Semester**

English 113 — Composition and Rhetoric  
Speech 123C — Basic Theatre Practice  
Recreation 113 — Introduction to Recreation Services  
Recreation 113A — Handcraft  
Recreation 113C — Seminar

#### **First Year — Second Semester**

Speech 113B — Speech for Prospective Teachers  
Recreation 123 — Social Recreation  
Recreation 123A Science Crafts  
Recreation 123B — Field Work I  
Recreation 123C — Individual Lifetime Sports

#### **Summer School**

Recreation 113S — Special Problems  
Recreation 123S — Special Problems

#### **Second Year — First Semester**

Psychology 213 — Introductory Psychology  
Music 113L — Introduction to Music  
Recreation 213 — Group Leadership  
Recreation 213A — Outdoor Recreation  
Recreation 213B — Field Work II

#### **Second Year — Second Semester**

Sociology 213 — Introduction to Sociology  
Recreation 223A — Folk, Square and Social Dancing  
Recreation 223B — Program Planning and Organization  
Recreation 223C — Field Work III  
Recreation 223D — Water Related Sports



**RECREATION LEADERSHIP CURRICULUM****(Sports Facilities Management Option)****First Year — First Semester**

English 113 — Composition and Rhetoric  
Physical Education 223 — Sports Understanding  
Business Administration 113A — Elementary Accounting  
Recreation 113 — Introduction to Recreation Service  
Recreation 113C — Seminar

**First Year — Second Semester**

English 123 — Composition and Rhetoric  
Speech 113B — Speech for Prospective Teachers  
Business Administration 123A — Elementary Accounting  
Recreation 123 — Social Recreation  
Recreation 123B — Field Work I

**Second Year — First Semester**

Business Administration 113B — Introduction to Business  
Psychology 213 — Introductory Psychology  
Recreation 213 — Group Leadership  
Recreation 213C — Camp and Club Management  
Recreation 213B — Field Work II

**Second Year — Second Semester**

Business Administration 213L — Business Law  
Sociology 213 — Introduction to Sociology  
Recreation 223B — Program Planning and Organization  
Recreation 223D — Water Related Sports  
Recreation 223C — Field Work III

**Summer Session**

Recreation 113S — Special Problems I  
Recreation 123S — Special Problems II

## Surveying

Students successfully completing this program receive the Associate-in-Applied Science Degree.

Surveying at Tyler Junior College was initiated at the request of Land Surveyors in the East Texas area. The courses offered are designed to teach the student the basic elements of surveying theory and to afford him enough supervised practice to enable him, in two years time, to become a useful apprentice to this industry. Land Surveying as such is emphasized and includes history, dendrology, marking corners, establishing boundaries, describing land by metes and bounds, calculating land areas, and the use of the Texas Coordinate System. Other phases of surveying taught are, topographic, construction, field mapping and route surveying.

### SURVEYING CURRICULUM

#### First Year — First Semester

Surveying 113 — Introduction to Surveying  
Surveying 113A — Surveying Measurements Practice  
English 113 — Composition and Rhetoric  
Mathematics 113E\* — Applied Mathematics I  
Approved Elective \*\*

#### First Year — Second Semester

Surveying 123 — Land Surveying  
Surveying 123A — Land Surveying Practice  
English 223B — Technical Report Writing  
Mathematics 123E\* — Applied Mathematics II  
Approved Elective \*\*

#### Second Year — First Semester

Surveying 213 — Topographic Surveying and Mapping  
Surveying 213A — Field Mapping Practice  
Mathematics 113B — Trigonometry  
Speech 223A — Business and Professional Speaking  
Approved Elective \*\*



**Second Year — Second Semester**

Surveying 223 — Route Surveying

Surveying 223A — Route Surveying Practices

Surveying 223B — Legal Principles of Boundary Location

Drafting 223B — Map Drafting

Approved Elective \*\*

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## DISTRIBUTIVE EDUCATION

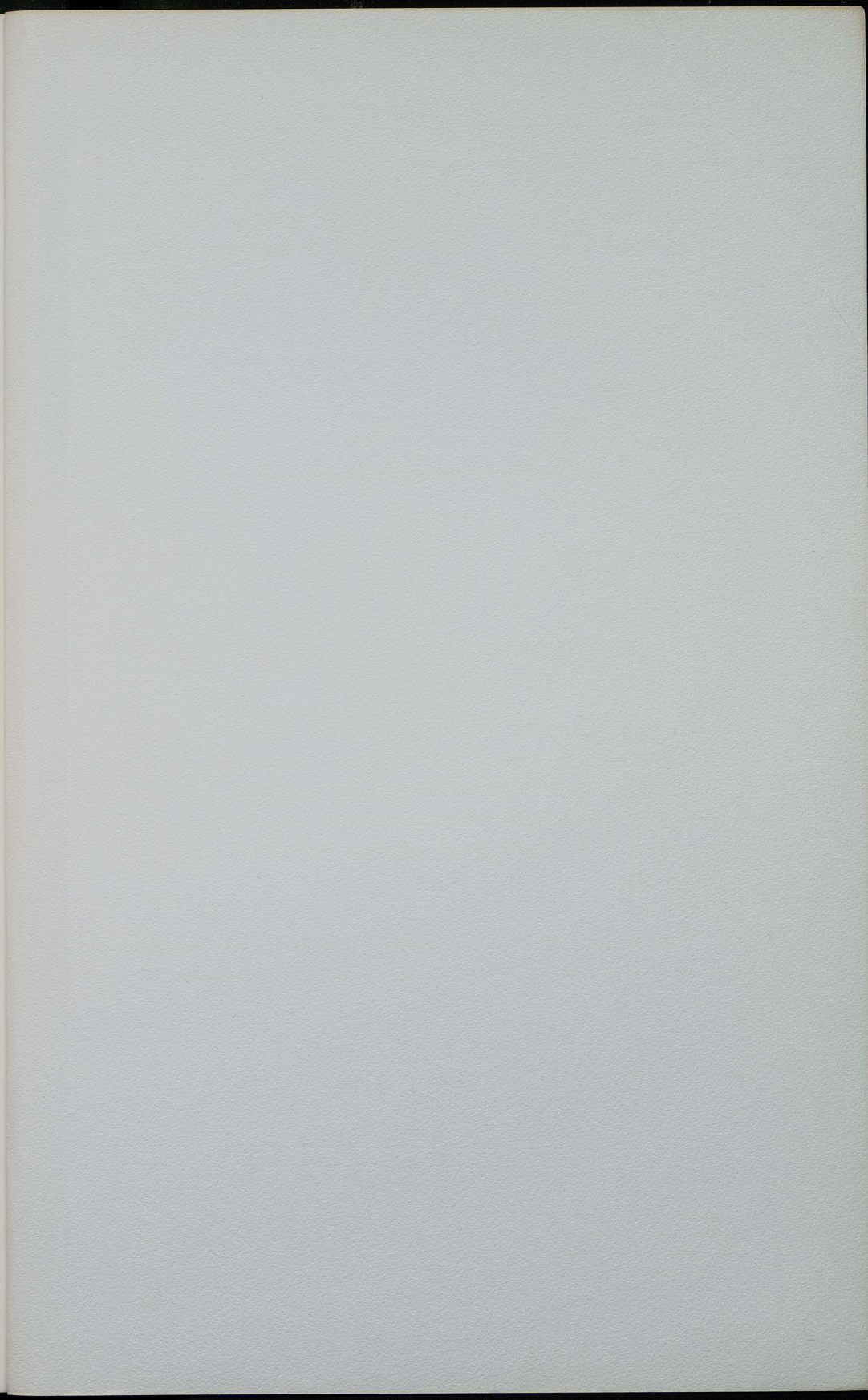
In accordance with its stated objectives, Tyler Junior College co-operates with business and industrial concerns of the area by providing special personnel training programs. Specialized non-credit courses in Distributive Education are organized whenever there is a request by a sufficient number of persons for such a class.

The courses are taught in either the regular day session or in the Evening Division to suit the needs of the students.

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\* Student placement in mathematics classes is based upon the results of tests and subjects completed before admission.

\*\* Approved Electives: Drafting 113A, Drafting 223B, Real Estate 113A, Real Estate 113B





**Tyler Junior College**

**Tyler, Texas 75701**